

Volume

#

R0396

BOOK A-396

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FIELD NOTES

OF THE SURVEY OF THE

Of the

Meridian,

In the State of

EXECUTED BY

for the expediency of U. S. Surveyor, under instructions dated, 191.

issued by the United States Surveyor General to govern surveys included in

Group No. which were approved by the Commissioner of the General Land

Office, 191, pursuant to authority contained in the Act of

Congress dated, 191.

Survey commenced, 191.

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FIELD NOTES

OF THE SURVEY OF THE

Of the Meridian,

In the State of

EXECUTED BY

In the capacity of U. S. Surveyor....., under instructions dated....., 191.....,
 issued by the United States Surveyor General to govern surveys included in
 Group No., which were approved by the Commissioner of the General Land
 Office....., 191....., pursuant to authority contained in the Act of
 Congress dated 191.....

Survey commenced 191.....

Survey completed 191.....

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FIELD NOTES

OF THE SURVEY OF THE

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Of the *Meridian,*

In the State of

EXECUTED BY

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In the capacity of U. S. Surveyor....., *under instructions dated*....., *191*.....,
issued by the United States Surveyor General to govern surveys included in
Group No......, *which were approved by the Commissioner of the General Land*
Office,....., *191*....., *pursuant to authority contained in the Act of*
Congress dated....., *191*.....

Survey commenced , *191*.....

Survey completed , *191*.....

BOOK A-396

"A"

MKW.

FIELD NOTES

OF THE SURVEY OF THE

PANGUITCH GUIDE MERIDIAN

Through

TOWNSHIP NO. 32 SOUTH, BETWEEN RANGES 4 $\frac{1}{2}$ and 5 WEST

AND

RETRACEMENT OF SOUTH AND EAST BOUNDARIES

OF SECTION 6

TOWNSHIP 32 SOUTH, RANGE 4 $\frac{1}{2}$ WEST

Of the SALT LAKE BASE AND Meridian,

In the State of U T A H

EXECUTED BY

JOHN P. STEWART, QUINBY STEWART, AND JOS. C. THOMA

U.S. Transitmen and

In the capacity of U. S. Surveyor, under instructions dated March 27, 1911, and supplemental special instructions dated November 25, 1914, issued by the United States Surveyor General to govern surveys included in

Group No. 8, which were approved by the Commissioner of the General Land Office, June 15, 1915, respectively

Office, April 22, 1911 and 191, pursuant to authority contained in the Act of

Congress dated, 191

Survey commenced June 10, 1911

Survey completed December 11, 1914.

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PANGUITCH GUIDE MERIDIAN

Tp. 32 S., Bet. Rs. 4 $\frac{1}{2}$ and 5 W.

Survey commenced June 10, 1911, and executed with a K. & E. transit No. 20578, with Smith's solar attachment. The horizontal limb is provided with two double verniers, placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on Mar. 20, 1911.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation, I proceed as follows:

At the cor. of secs. 1, 6, 7 and 12, on the Panguitch Guide Meridian, T. 32 S., bet. Rs. 4 $\frac{1}{2}$ and 5 W., latitude 38°03'25"N., longitude 112°20'04"W., I set off 38°03'N. on the lat. arc; 22°59'N. on the decl. arc; and at 36 59m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

June 10, 1911.

June 12, 1911: At 2h 13.4m a.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

At 7h 30m a.m., l.m.t., I lay off the azimuth of Polaris 1°29' to the west, and mark the meridian thus determined, by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.35 ins. east of the meridian determined by the solar.

PANGUITCH GUIDE MERIDIAN

Tp. 32 S., Bet. Rs. 4 $\frac{1}{2}$ and 5 W. - Contd.

Chains

At 7h 59m a.m., l.m.t., I set off 38°03'N. on the lat. arc; 23°08'N. on the decl. arc; and mark the meridian determined by the solar, by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.39 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about 0'18" west and 0'21" east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8h 30m a.m., is N.16°15'W.; the angle thus determined gives the mag. decl. 16°15'E.

The cor. of secs. 1, 6, 7 and 12, is a sandstone, 9 x 10 x 8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, mkd. on brass cap

T 32 S in N half;

R 5 W S 1 in NW.;

R 4 $\frac{1}{2}$ W S 6 in NE.;

S 7 in SE.; and

S 12 in SW. quadrants;

raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Thence I run

North, bet. secs. 1 and 6.

Over mountainous land, through dense undergrowth.

Asc.

1.90 Top of spur, 40 ft. above cor., bears E. and W.

Desc.

Panguitch Guide Meridian, T. 32 S., bet. Rs. 4 $\frac{1}{2}$ and 5 W. Contd.

Chains

- 9.50 Bottom of hollow, 150 ft. below ridge, course E.
Asc.
- 10.10 Road, bears E. and W.
- 14.00 Enter scattering timber, bears N. 70° E. and S. W.
- 19.40 Begin abrupt ascent over ledges, bears E. and W.
- 58.50 Top of ridge, 600 ft. above hollow, bears E. and W.
Desc. abruptly.
- 40.00 Difference bet. measurements of 40.00 chs. by two sets of
chainmen is 12 lks.; position of middle point,
By 1st set 59.94 chs.
By 2nd set 40.06 chs.; the mean of which is
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the
ground, on solid rock, and surrounded by mound of stone,
for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 1 in W half and
S 6 in E half; from which
A pinon pine, 12 ins. dia., bears N. 76° 15' E., 28 lks.
dist. mkd. $\frac{1}{2}$ S 6 E T.
A pinon pine, 10 ins. dia., bears N. 61° W, 22 lks.
dist. mkd. $\frac{1}{2}$ S 1 E T.
- 63.90 Bottom of hollow, 400 ft. below ridge, course S. 80° E.
Asc.
- 67.70 Road to Fremont Canon, bears N. 80° W. and S. 80° E.
- 78.40 Foot of ledges, bears E. and W.
- 80.00 Difference between measurements of 80.00 chs. by two sets
of chainmen is 14 lks. position of middle point,
By 1st set 79.93 chs.
By 2nd set 80.07 chs.; the mean of which is
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the
ground, for cor. of Tps. 31 and 32 S., Rs. 4 and 5 W on N. and
4 $\frac{1}{2}$ and 5 W. on S., mkd. on brass cap
T 31 S in N half.
T 32 S in S half.
R 5 W S 36 in NW.
R 4 W S 31 in NE.
R 4 $\frac{1}{2}$ W S 6 in SE.; and
R 5 W S 1 in SW. quadrants; and raise a mound
of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Banguitch Guide Meridian, through T.32 S., bet. Rs. 4 $\frac{1}{2}$ and 5 W.

Chains

Land mountainous.

Soil, sandy and gravelly loam, hard texture.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

30.00 chs.

June 12, 1911.

Gunby Stewart

U. S. Transitman.

RETRACEMENT PART OF E. BDY. OF SEC. 6,

T. 32 S., R. 4 1/2 W.

Chains

Survey commenced June 28, 1911, and executed with a Keuffel & Esser transit No. 20578, with solar attachment. For description and test of instrument see notes of S. Bdy. of T. 31 S., R. 4 W.

Note: In compliance with Special Instructions I begin at the 1/4 sec. cor. bet. secs. 5 and 6, T. 32 S., R. 4 1/2 W., which is a sandstone, 10 x 9 x 7 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

Thence I run

N.0°03'W., on a true line bet. the north halves of secs. 5 and 6.

Over mountainous land; through dense sagebrush.

Desc.

1.70 Bottom of hollow, 20 ft. below cor., course N.80°W.

Asc.

16.60 Top of ridge, 200 ft. above hollow, bears N.80°W. and S.80°E.

Desc.

39.43 Intersect N. bdy. of Tp., 7.58 chs. west of the cor. of secs. 5, 6, 31 and 32, just established.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 5 and 6, mkd. on brass cap

C C T 31 S R 4 W S 31 S 32 in N half,

R 4 1/2 W S 5 in SE.; and

T 32 S S 6 in SW quadrants; and

raise a mound of stone, 2 ft. base, 1 1/2 ft. high, S. of cor.

Note: I destroy all marks on the cor. of secs. 5, 6, 31 and 32, which pertain to secs. 5 and 6, T. 32 S., R. 4 1/2 W.

Land, mountainous.

Soil, sandy and gravelly; 2nd and 3rd rate.

Timber, cedar and pinon pine, very scattering.

Undergrowth, sagebrush.

Chairs

Good grass.

Mountainous land or land covered with dense undergrowth

39.43 chs.

June 28, 1911.

John R Stewart
U. S. Surveyor.

Volume

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RETRACEMENT OF LINE BET. SECS. 6 and 7

T. 32 S., R. 4 1/2 W.

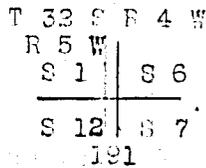
Chains

Survey commenced December 11, 1914, and executed with a Young & Sons light mountain transit No. 8535, with Smith solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Kanab, Utah, and found correct December 7, 1914.

I proceed to the cor. of secs. 1, 3, 7 and 12 T. 32 S., Rgs. 4 1/2 and 5 W., which is

A 3 in. iron post, 12 ins. above ground, firmly set, mkd.



Mound of stone W. of cor.

At this cor. I set off 38°03' N. on the ht. arc, 22°58' S. on the decl. arc, and at 1h 53m p.m., l.m.t., determine the meridian with the solar.

East retracing line bet. secs. 6 and 7.

6.50 Wagon road from Circleville to Panguitch, bears N. 35° E. S. 30° E.

7.30 Wire fence, parallel to wagon road. Desc. across river bottom.

9.00 Telephone line, Circleville to Panguitch, bears N. & S.

17.50 Sevier River, 60 lks. wide, 3 ft. deep, water clear, course N. 35° E.; asc.

29.48 Fall 16 lks. S. of 1/4 cor., which is

A sandstone 18x12x6 ins. loosely set in mound of stone, no accessories.

This falling answers to the course of N. 89°41' E.

I continue East on same line, asc. gradually.

69.87 Fall 13 lks. N. of the cor. of secs. 5, 6, 7 and 8, which is

A granite stone 6x6x6 ins. above ground, firmly set;

Chains

mkd. as described by the Surveyor General.
 This falling answers to the course of S. 89°35'E.

North bet. secs. 5 and 6.

Over rolling land, covered with sagebrush and greasewood undergrowth.

10.00 Dry draw, drains W. Asc.

40.25 Fall 5 lks. W. of the $\frac{1}{4}$ cor. bet. secs. 5 and 6, which is
 A sandstone 10x10x6 ins. above ground, firmly set, mkd.
 and witnessed as described by the Surveyor General.
 This falling answers to the course of N. 0°04'E.

December 11, 1914,

Geo. B. Shana
 U.S. Surveyor.

Land, rolling.

Soil, gravel and stony on slopes, light sandy loam of medium texture in river bottom.

Undergrowth, sagebrush and greasewood. No timber.

Geo. B. Shana
 U.S. Surveyor.

LATITUDES, DEPARTURES AND CLOSING ERRORS

Lines designated	Course	Dist. chs.	Latitudes		Departures	
			N. chs.	S. chs.	E. chs.	W. chs.
Panguitch G.M.	North	80.00	80.00	.....	.....	.....
N. Edy. Sec. 6	East	70.16	.....	.....	70.16	.....
East Edy. Sec. 6	S. 0°03'E.	39.43	.....	39.43	.03	.....
	S. 0°04'W.	40.25	.....	40.25	.....	.04
South Edy. Sec. 6	N. 89°35'W.	40.39	...29	.....	.....	40.39
	S. 89°41'W.	29.48	.....	...16	.....	29.48

Totals
 80.29 79.84 70.19 69.91
79.84 69.91

Error in lat. .45 in dep. .28

GENERAL DESCRIPTION:

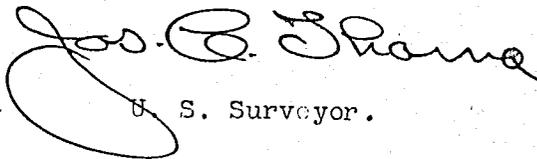
The land in the south east quarter of Sec. 6, is rolling and draining westerly into the Sevier River. The remainder of the land in the section is rough and mountainous, except a narrow strip of land in the river bottom, between the county road and river, which is nearly level river bottom land.

The soil is mostly rocky and stony with rich sandy loam in the river bottom, a small area of which is well adapted for agricultural purposes.

The undergrowth is mostly sage brush and greasewood, with squaw brush and willows along the river banks. The timber is scrub cedar and pinon and is only found in the rough part of the section.

The Sevier River enters the Circleville Canon in the northern part of the sec.

There are no settlers in the township and I noticed no indication of oil or mineral.


J. B. Stone
U. S. Surveyor.

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BOOK A-396
C.

FILED
MAR 29 1912
WJH

FIELD NOTES

OF THE SURVEY OF THE

SOUTH BOUNDARY

of

Township No. 31 South, Range No. 5 West,

Of the Salt Lake Base and Meridian,

in the State of Utah

EXECUTED BY

Quinby Stewart

In the capacity of U. S. ~~Surveyor~~ ^{Transitman} under instructions dated March 27, 1911,

issued by the United States Surveyor General to govern surveys included in

group No. 8, which were approved by the Commissioner of the General Land

office, April 22, 1911, pursuant to authority contained in the Act of

Congress dated 1911

Survey commenced June 12, 1911.

Survey completed June 14, 1911.

4-57-50 ✓

FINAL OATH OF UNITED STATES SURVEYOR.

I, Jos. C. Thoma, U. S. Surveyor, do solemnly swear that, in pursuance of ^{supplemental} special instructions received from the U. S. Surveyor General for the State of Utah, bearing date of the twenty fifth day of November, 1914, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Retracement of the South, and part of the East Boundaries of Sec. 6, T. 32 S., R. 4 1/2 W. of the Salt Lake

of the _____ of the _____ Base and _____ Meridian, in the State of Utah, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Jos. C. Thoma
U. S. Surveyor.

Subscribed by said Jos. C. Thoma, and sworn to before me }
this 17th day of February, 1915.

A. C. Pharesen
U. S. Surveyor General for _____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, 1915

The foregoing field notes of the ~~survey of~~ retracement of the south and part of the east boundaries of section 6, Township 32 South, Range 4 1/2 West of the Salt Lake Base and Meridian, Utah,

executed by John F. Stewart and Joseph C. Thoma under ~~his~~ ^{mental special instructions dated Nov. 25, 1914} special instructions dated March 27, 1911 and ~~supple-~~ ^{ment-} 1911, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ~~retracements~~ surveys they describe, are hereby approved,

U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, May 6 _____, 1915.

The foregoing field notes of the survey of _____ part of the Panguitch Guide Meridian through Township 32 South, between Ranges 4¹/₂ and 5 West; and retracement of south and east boundaries of section 6, Township 32 South, Range 4¹/₂ West of the Salt Lake Base and Meridian, Utah,

executed by _____ John R. Stewart, Quinby Stewart, and Joseph C. Thomas special instructions dated November 25, 1914 under ~~my~~ special instructions dated March 27, 1911 and supplemental _____, having been critically examined, and the necessary corrections and explanations made the said field notes, and the surveys ^{and retracements} they describe, are hereby approved.

[Handwritten Signature]
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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BOOK A-396

B.

FILED
MAR 29 1911
[Signature]

Alto FIELD^B NOTES

OF THE SURVEY OF THE

RETRACEMENT

SIXTH STANDARD PARALLEL SOUTH

through

Range 5 West. ✓

Of the Salt Lake Base and Meridian,

in the State of Utah

EXECUTED BY

John R. Stewart and Quinby Stewart

in the capacity of U. S. ^{Transitmen} ~~Surveyors~~ under instructions dated March 27, 1911,

issued by the United States Surveyor General to govern surveys included in

group No. 8, which were approved by the Commissioner of the General Land

office, April 22, 1911, pursuant to authority contained in the Act of

Congress dated _____, 1911.

Survey commenced June 11, 1911, 1911

Survey completed June 17, 1911, 1911

20-2-5-92

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INDEX DIAGRAM.

Township 31 South, Range 5 West

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Retracement 6th Standard Farallel South, through Range 5 W

Chains

Survey commenced June 11, 1911, and executed with a W. and L. E. Gurley Explorer's Transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on March 29, 1911.

I examine the adjustments of the instrument and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours, with a meridian established by Polaris observation, I proceed as follows:

At the closing Standard cor. of T. 30 S., R 5 W., latitude $38^{\circ}09'30''$ N., longitude $112^{\circ}26'39''$ W., I set off $38^{\circ}09'$ N. on the lat. arc, $23^{\circ}05'$ N. on the decl. arc, and at 3h 59m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground 5.00 chs. N. of the cor.

June 11, 1911.

June 12, 1911: At 2h 13,4m a.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

At 7h 30m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}28'$ to the west, and mark the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor., this mark falls 0.31 ins. east of the meridian established by the solar.

At 7h 59m a.m., l.m.t., I set off $38^{\circ}09'30''$ N. on the lat. arc, $23^{\circ}08'$ N. on the decl. arc, and mark the meridian

Retracement 6th Standard Parallel South, Range 5 W.

Chains

determined with the solar, by a cross on the stone already set 5.00 chs. N. of the cor., this mark falls 0.38 ins. east of the meridian established by Polaris observation. The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about 0'16" west and 0'20" east of the meridian established by Polaris observation, therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8h 30m a.m. is N 16°15'W. the angle thus determined gives the mag. decl. 16°15'E.

The closing standard cor. of Tp. 30 S., R. 5 W. is 7.86 chs. North of the south east cor. of Tp. 30 S., R. 6 W. instead of 6.59 chs. reported on plat furnished by the surveyor general, which is a sandstone 16x10x5 ins. above ground, marked and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for closing standard cor. of Tp. 30 S., R. 5 W. marked on brass cap

T 30 S in N. half
C C R 5 W S 31 in NE., and
R 6 W S 36 in W. half; from which
A red pine, 5 ins. dia., bears N 29°30'E., 77
lks. dist., mkd. T 30 S R 5 W S 31 B T

Thence I run

East along south bdy. sec. 31 on retracement line.
Over mountainous land, through heavy pine and aspen timber, and dense oak, service berry and buck brush. Ascend.

45.00 Top of ridge, 400 ft. above cor., bears N. and S. Descend.

48.03 Fall 6.33 chs. south of St. 1/4 sec. cor. on S. side of sec. 31, which is a trachyte stone, 5x8x7 ins. above ground,

Retracement 6th Standard Parallel South, Range 5 W.

Chains firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ^{St.} $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 31 in N half. and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

58.00 Bottom of hollow, 200 ft. below ridge, course N.

Asc.

73.00 Top of spur, 125 ft. above hollow, bears N. and S.

Desc.

88.07 Fall 6.35 chs. South of the standard cor. of secs. 31 and 32, which is a trachyte stone, 6x10x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor. of secs. 31 and 32, mkd. on brass cap

T 30 S S 31 in NW.; and

R 5 W S 32 in NE. quadrants; from which

An aspen, 5 ins. dia., bears N. 50° E., 6 lks.

distl. mkd. T 30 S R 5 W S 32 B T

An aspen, 5 ins. dia., bears N. 75° W., 16 lks.

dist. mkd. T 30 S R 5 W S 31 B T

The course of the west half of this mile is therefore N. 82° 50' E., 48.44 chs. and the east half is East 40.04 chs.

Land, high steep mountains.

Soil, rich black loam about 3 ft. deep.

Timber, aspen and pine.

Undergrowth aspen saplings and oak brush; oak and serviceberry.

Excellent grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 88.48 chs.

June 12, 1911: At this cor. I set off 23° 08' N., on the decl.

Retracement 6th Standard Parallel South, Range 5 W. Contd.

- Chains
- arc; and at 11 h 59 m a.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}09'N$. which is the proper lat. nearly.
- East, on a retracement line along south side of sec. 32. Over mountainous land; through heavy timber and scattering undergrowth.
- Asc.
- 9.00 Top of ridge, 150 ft. above cor., bears $N.75^{\circ}E$. and $S.75^{\circ}W$. Ascend.
- 30.00 Leave timber, bears N. and S.
- 39.90 Top of ridge, 250 ft. above last ridge, bears N. and S. Desc.
- 39.96 Intersect the old standard $\frac{1}{2}$ sec. cor., which is a trachyte stone, 5x10x6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and replace it as follows. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for Standard $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 32 in N half and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 45.00 Enter heavy timber, bears N. and S.
- 56.00 Desc. abruptly, bears N. and S.
- 65.00 Bottom of canon, 400 ft below ridge, course S. Asc.
- 71.00 Ledge, 15 ft. high, bears N. and S.
- 79.64 Intersect the standard cor. of secs. 32 and 33, which is a trachyte stone, 10x12x8 ins. above ground, firmly set, and mkd. as described by the surveyor general. The bearing tree described in the old notes has been destroyed by fire. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the

Retracement 6th Standard Parallel South, Range 5 W. -contd.

Chains

ground, for standard cor. of secs. 32 and 33, mkd. on brass cap

T. 30 S S 32 in. NW.; and

R. 5 W S 33 in NE. quadrants; from which

An aspen, 4 ins. dia., bears N. 53° E., 35 lks.

dist. mkd. T 30 S R 5 W S 33 B T.

An aspen, 4 ins. dia., bears N. 50° W., 25 lks.

dist. mkd. T 30 S R 5 W S 32 B T.

The course of this mile is therefore East 79.64 chs.

Land, high mountains with steep slopes.

Timber, piñer and aspen.

Undergrowth, aspen saplings.

Good grass for grazing.

Mountainous or heavily timbered land, 79.64 chs.

June 12, 1911.

June 16, 1911: At 8 h 0 m a.m., 1 mt. I set off 38° 09' 30" N. on the lat. arc; 23° 21' N., on the decl. arc; and determine a meridian with the solat, at the cor. of secs. 32, and 33.

Thence I run

East, on a retracement line along south side sec. 33.

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

6.30 Top of ridge, 100 ft. above cor., bears N. and S.

Desc.

24.50 Bottom of hollow, 500 ft. below ridge, course S.

Asc.

30.00 Asc. abruptly over ledges, bears N. and S.

34.26 Top of ridge, 250 ft. above hollow, bears N. and S.

Intersect the witness cor. to Standard 1/4 sec. cor., which is a trachyte stone, 8x24x12 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old witness cor. and re-establish it in the same place as follows:

Retracement 6th Standard Parallel South, range 5 W. Contd.

Chains

Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for witness cor. to Standard $\frac{1}{2}$ sec. cor. mkd. on brass cap W C T 30 S R 5 W $\frac{1}{2}$ S 33 in N half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

48.00 Bottom of hollow, 600 ft. below ridge, course S.

Asc. abruptly over ledges.

56.00 Top of ridge, 250 ft. above hollow, bears NW and SE.

Desc. abruptly over ledges.

79.30 Intersect the standard cor. of secs. 33 and 34, which is a trachyte stone, 7x6x6 ins., above ground, firmly set, and mkd. as described by the surveyor general. The bearing tree described in the old notes is N. 19° 30' W. 6 lks. dist. instead of N. 3 lks. dist.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor. of secs. 33 and 34, mkd. on brass cap

T 30 S S 33 in NW.; and

R 5 W S 34 in NE. quadrants; from which

A pine, 5 ins. dia., bears N. 70° E., 12 lks.

dist. mkd. T 30 S R 5 W S 34 B T.

A white pine, 10 ins. dia., bears N. 10° 30' W., 6 lks.

dist. mkd. T 30 S R 5 W S 33 B T.

The course of this mile is therefore East 79.30 chs.

Land high and rough mountains.

Soil, black loam; 1st rate about 2 ft. deep except in the ledges where there is very little soil.

Timber, aspen and pine.

Undergrowth, oak and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, 79.30 chs.

June 16, 1911: At this cor. I set off 25° 21' N., on the decl. arc; and at 0 h 1 m p.m., l.m.t., I observe the sun on the meridian. the resulting lat. is 33° 09' N., which is the proper lat. nearly.

Retracement 6th Standard Parallel South, through Range 5 W.

Chains

East, on a retracement line on S. side of sec. 34 .

Over mountainous land; through heavy timber and dense undergrowth.

Desc.

9.00 Creek, 3 lks. wide, 2 ins. deep, in bottom of canon, 150 ft. below cor., course SE.

Leave heavy and enter scattering timber, bears NW and SE.

Asc.

17.00 Top of spur, 150 ft. above canon, bears N. 20° W. and S. 20° E.
Continue ascent along side of canon.

40.00 Fall 5 lks. S. of the standard $\frac{1}{2}$ sec. cor. on S. side of sec. 34, which is a trachyte stone, 5x10x10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 5 ft. long, 1 in. in dia., 26 ins. in the ground, for standard $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 34 in N half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

76.00 Top of ridge, 150 ft. above spur, bears NW and SE.

Desc.

79.25 Fall 10 lks. South of the standard cor. of secs. 34 and 35, which is a trachyte stone, 10x12x5 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 5 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor. of secs. 34 and 35, mkd. on brass cap

T 50 S S 34 in NW.; and

R 5 W S 35 in NE quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

The course of this mile is therefore N. 89° 56' E., 79.25 chs.

Land mountainous .

Retracement 6th Standard Parallel South Range 5 W. Contd.

Chains

Soil, clay loam; 2nd rate and subsoil, gravel .

Timber, cedar pinon pine, aspen and pine.

Undergrowth, oak and sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.25 chs. ✓

June 16, 1911.

June 17, 1911: At 8 h 0 m a.m., l.m.t., I set off $38^{\circ}09'$ N., on the 1st. arc; $25^{\circ}23'$ N., on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 34 and 35.

Thence I run

East, on a retracement line along south side of sec. 35 over mountainous land; through scattering cedar and pinon pine timber and scattering undergrowth.

Desc.

11.00 Creek, 3 lks. wide, 2 ins. deep, in bottom of hollow, 250 ft. below cor., course SE.

Asc. through dense undergrowth.

14.75 Begin steep ascent over ledges bears NW and SE.

32.00 Top of ridge, 300 ft. above canon, bears NW and SE.

Leave ledges, bears NW and SE.

Desc.

40.01 Fall 1 lk. S. of the Standard $\frac{1}{4}$ sec. cor. on south side sec. 35 which is a trachyte stone, 5x10x10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for Str. $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S. 55 in N. half;

9

Retracement 6th Standard Parallel S. through R.5 W. Contd.

Chains

and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

60.50 Road, bears N. and S.

70.00 Bottom of hollow, 250 ft. below $\frac{1}{2}$ sec. cor., course N. 70° E.

Desc. gradually.

79.70 Fall 13 lks. South of the Standard cor. of secs. 35 and 36, which is a trachyte stone, 10x8x5 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor. of secs. 35 and 36, mkd. on brass cap

T 30 S S 35 in NW.; and

R 5 W S 36 in NE. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

The course of the west half of this mile is N. $69^{\circ}59'$ E.

40.01 chs. and the east half is N. $89^{\circ}50'$ E., 39.69 chs.

Land, mountainous .

Soil, sandy and gravelly; 2nd and 3rd rate subsoil, gravel

Timber, cedar and pinon pine, and aspen.

Undergrowth, sage, oak, and mahogany.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth

79.70 chs.

June 17, 1911: At this cor. I set off $23^{\circ}23'$ N., on the decl.

arc; and at 0 h 1 m p.m., l.m.t., I observe the sun on the

meridian, the resulting lat. is $38^{\circ}09'$ N., which is the

proper lat. nearly.

East, on a retracement line along south side sec. 36.

Over mountainous land; through dense undergrowth and scattering timber .

Desc.

10.50 Bottom of Big Pine Creek Canon, 100 ft. below cor., course S. 70° E. Creek, 6 lks. wide, 4 ins. deep, in bottom. good water, rocky bottom, rapid current.

Retrace ment 6th Standard Parallel South, through R. 5 W. Contd.

Chains	
	Continue descent.
11.50	Road, bears NW and SE.
39.30	Fall 21 lks. South of the old $\frac{1}{4}$ sec. cor. on S. side sec. 36.
	which is a trachyte stone, 9x10x4 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	I destroy the old cor. and re-establish it in the same place as follows:
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for Standard $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 36 in N half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
42.00	Creek, 3 lks. wide, 2 ins. deep, in bottom of hollow, 60 ft below $\frac{1}{4}$ sec. cor., course S.
	Desc. gradually along side of Big Pine Creek Canon.
50.00	Enter heavy cedar and pinon pine timber, bears N. and S.
70:50	Desc. abruptly over ledges, bears N. and S.
71.50	Leave ledges, bears N. and S.
79.55	Fall 43 lks. South of the old standard cor. of Tps. 30 S.
	Rs. 4 and 5 W., which is a trachyte stone, 5x10x5 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	I destroy the old cor. and re-establish in the same place as follows:
	Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for Standard cor. of Tps. 30 S., Rs. 4 and 5 W. mkd. on brass cap
	T 30 S in N half.
	R 5 W S 36 in NW.; and
	R 4 W S 31 in NE.; quadrants; from which
	A pinon pine, 8 ins. dia., bears N. 32° E., 30 lks.
	dist. mkd. T 30 S R 4 W S 31 B T.
	A pinon pine, 10 ins. dia., bears N. 73° W., 52 lks.
	dist. mkd. T 30 S R 5 W S 36 B T.
	The course of the mile is therefore N. 89° 42' E., 79.55
	chs.

Retracement 6th Standard Parallel South, Range 5 W.-Contd.

Chains

Land, mountainous .

Soil, sandy and gravelly loam; 2nd rate about 15 ins.
deep. subsoil, gravel and clay.

Timber, cedar and pinon pine. aspen and pine.

Undergrowth, sage , oak, and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 79.55 chs.

W. M. S., June 17, 1911.

John R. Stewart

U.S. Transitman.

Volume

#

R0396

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Page

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor; do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of transitman see book "P" T. 32 S., R. 9 E.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, June 18, 1914

The foregoing field notes of the ~~survey of~~ retracement of the Sixth Standard Parallel South, through Range 5 West of the Salt Lake Base and _____ Meridian, Utah, _____

executed by _____ John R. Stewart _____ under his special instructions dated _____ March 27, _____, 191____, having been critically examined, and the necessary corrections and explanations made the said field notes, and the _____ surveys they describe, are hereby approved.

J. C. Fraser
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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BOOK A-396
C.

FILED
MAR 29 1911
WJH

FIELD NOTES

OF THE SURVEY OF THE

SOUTH BOUNDARY

of

Township No. 31 South, Range No. 5 West,

Of the Salt Lake Base and Meridian,

in the State of Utah

EXECUTED BY

Quinby Stewart

in the capacity of U. S. ^{Transitman}~~Surveyor~~ under instructions dated March 27, 1911,

issued by the United States Surveyor General to govern surveys included in
Group No. 8, which were approved by the Commissioner of the General Land

Office, April 22, 1911, pursuant to authority contained in the Act of
Congress dated 1911

Survey commenced June 12, 1911.

Survey completed June 14, 1911.

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INDEX DIAGRAM.

Township 31 South, Range 5 West

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31	32	33	34	35	36
7	6	5	4	3	1

South bdy. T.31 S., R.5 W.

Survey commenced June 12, 1911, and executed with a K. and E. solar transit, No. 20578, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc which is also the least count of latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on Mar. 20, 1911.

At the cor. of Tps. 31 and 32 S., Rs. 4 and 5 W., established this day, latitude $38^{\circ}04'17''$ N., longitude $112^{\circ}20'04''$ W., I set off $38^{\circ}04'$ N., on the lat. arc; $23^{\circ}09'$ N., on the decl. arc; and at 2 h 0 m p.m., l.m.t., I determine a meridian with the solar, at the cor. of Tps. 31 and 32 S., Rs. 4 and 5 W.

Note: The complete test of instrument was made one mile south of this cor. on this day in the survey of the line bet. secs. 1 and 6, Panguitch Guide Meridian T. 32 S., Rets. Rs. $4\frac{1}{2}$ and 5 W.; therefore I deem it unnecessary to make a complete test at this cor.

Thence I run

Note: Knowing from retracements and calculations that the south bdy. of Tp. will not intersect the west bdy. within limits; I decide to run the bdy. west on a true line instead of running west on a random and east on a true line as the Special Instructions indicate.

West, on a true line bet. secs. 1 and 36.

Over mountainous land; through scattering timber and sage brush.

Desc.,

2.40 Bottom of hollow, 60 ft. below cor., course SE.

Asc.

12.30 Foot of ledges, 100 ft. above hollow, bears N. 15° E. and S. 15°

17.00 Top of ridge, 200 ft. above hollow, bears N. 10° W. and S. 10° E

Desc. over ledges.

23.20 Foot of ledges, bears N. and S.

Chains

- 31.60 Bottom of hollow, 200 ft. below ridge, course S. 20° E.
Asc.
- 32.95 Foot of ledges, bears N. and S.
Note: The $\frac{1}{4}$ sec. cor. will fall on sloping ledges where it will be impossible to set the cor. therefore at this point I
Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of earth and stone, for witness cor. to $\frac{1}{4}$ sec. cor., mkd. on brass cap T 31 S. R. 5 W. C. $\frac{1}{2}$ S 36 in N half; and S 1 in S half and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N of cor.
Asc. abruptly over a series of precipitious ledges.
- 40.00 Point for $\frac{1}{4}$ cor.
- 42.60 Top of ridge, 300 ft. above hollow, bears N. 10° W. and S. 10° E
Desc. over ledges.
- 47.30 Bottom of hollow, 70 ft. below ridge, course S.
Asc. over ledges.
- 72.40 Top of ridge, 200 ft. above hollow, bears N. and S.
Desc. over ledges.
- 90.00 Set an iron post, 3 ft. long, 3 ins. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of earth and stone for cor. of secs. 1, 2, 35, and 36, mkd. on brass cap
T 31 S S 35 in NW.
R 5 W S 36 in NE.
R 5 W S 1 in SE; and
E 32 S S 2 in SW quadrants; from which
A cedar, 14 ins. dia., bears N. 68° E., 14 lks.
dist. mkd. T 31 S R 5 W S 36 B T.
A cedar, 8 ins. dia., bears S. 56° 45' E., 54 lks.
dist. mkd. T 32 S R 5 W S. 1 B T.
A pinon pine, 8 ins. dia. bears S. 62° W., 48 lks.
dist. mkd. T 32 S R 5 W S 2 B T.
A pinon pine, 10 ins. dia., bears N. 10° 30' W., 40 lks. dist. mkd. T 31 S R 5 W S 35 B T.

S. bdy. T. 31 S., R. 5 W. - Continued.

Chains

Land mountainous very steep and rough .

Soil, clay mixed with some gravel about 18 ins. deep except on bare ledges.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Some good grass .

Mountainous land, 30.00 chs.

June 12, 1911.

June 13, 1911: At 8 h 0 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat. arc; $23^{\circ}11'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 1, 2, 35, and 36.

Thence I run

West, on a true line bet. secs. 2 and 35.

Over mountainous land; through scattering timber and undergrowth..

Asc. abruptly over ledges.

4.50 Top of ledge and ridge, 150 ft. above cor., bears $N.10^{\circ}E.$ and $S7.$

Desc. over ledges.

22.70 Bottom of hollow, 200 ft. below ridge, course $S.20^{\circ}W.$

Asc. abruptly over ledges.

36.00 Top of ridge, 250 ft. above hollow, bears $N.25^{\circ}W.$ and $S.25^{\circ}E.$

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. c r. mkd. on brass cap $\frac{1}{2}$ S 35 in N half and S 2 in S half; from which

A pinon pine, 10 ins. dia., bears $N.24^{\circ}E.$, 24 lks.

dist. mkd. $\frac{1}{2}$ S 35 B T.

A pinon pine, 14 ins. dia., bears $S.9^{\circ}E.$, 23 lks.

dist. mkd. $\frac{1}{2}$ S 2 B T.

S. 31 T. 51 S., R. 5 W. - Continued.

Chains

54.80 Bottom of swale, 70 ft. below ridge, course S. 25° E.

Asc.

64.00 Top of spur, 40 ft. above swale, bears N. 20° W. and S. 20° E.

Desc.

69.00 Bottom of hollow, 40 ft. below spur, course S. 10° E.

Asc.

75.00 Top of spur, 40 ft. above hollow, bears N. 10° W. and S. 10° E.

Desc.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 2, 3, 34, and 35, mkd. on brass cap

T 31 S S 34 in NW.

R 5 W S 35 in NE.

R 5 W S 2 in SE.; and

T 32 S S 3 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Land, mountainous E. half very rough West half more rolling.

Soil, gravelly with rocky subsoil.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, 80.00 chs.

June 13, 1911: At this cor. I set off 23° 12' N.; on the decl. arc; and at 0 h 1 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is 38° 04' N., which is the proper lat. nearly.

West, on a true line bet. secs. 3 and 34.

Over mountainous land; through scattering timber and dense undergrowth.

Desc.

1.00 Bottom of hollow, 30 ft. below cor., course S. 20° E.

Asc.

18.00 Top of spur, 60 ft. above hollow, bears N. 10° W. and S. 10° E.

Desc.

S.bdy.T.31 S.,R.5 W.--Continued.

Chains

- 30.50 Bottom of hollow, 90 ft. below ridge, course S. 80° E.
Asc.
Leave timber, bears N. 80° W. and S. 80° E.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 34 in N half and S 3 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 50.00 Road to Fremont Canon, bears N. 60° W. and S. 60° E.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, mkd. on brass cap
T 31 S S 33 in NW.
R 5 W S 34 in NE.
R 5 W S 3 in SE.; and
T 32 S S 4 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Land, rolling mountainous.
Soil, red sand and rocky about 2 ft. deep. Subsoil gravelly.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Mountainous land, or land covered with dense undergrowth
- 80.00 chs.
- West, on a true line bet. secs. 4 and 33.
Over rolling mountainous land; through dense undergrowth
Asc.
- 40.00 Set an iron post, 3 ft. long, 1 ins. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 33 in N half and S 4 in S half; dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 45.00 Top of ridge, 200 ft. above sec. cor., bears NW and SE.
Desc.
- 62.50 Bottom of hollow, 150 ft. below ridge, course N.
Asc. gradually.

S. bdy. T. 51 S., R. 5 W. -Continued.

Chains

30.00 Top of knoll or ridge, 60 ft. above hollow, bears N. 10° E. and S. 10° W.
 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, mtd. on brass cap
 T 51 S 5 32 in NW;
 R 5 W S 35 in NE.
 R 5 W S 4 in SE, and
 T 32 S S 5 in SW quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
 Land rolling, mountainous.
 Soil, red sand and gravel about 30 ins. deep. subsoil, gravel
 No timber.
 Undergrowth, sage brush, and rabbit brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth
 80.00 chs.

June 13, 1911.

June 14, 1911: At 8 h 0 m a.m., l.m.t., I set off $38^{\circ}04'$ N., on the lat. arc; $23^{\circ}14'$ N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 4, 5, 32, and 33.

Thence I run

West, on a true line bet. secs. 5 and 32.

Over rolling mountainous land; through dense undergrowth

Desc.

9.00 Foot of descent, 50 ft. below cor., bears N. and S.

Enter rolling valley. Dog Valley.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mtd. on brass cap $\frac{1}{4}$ S 32 in W half and S 5 in S half; dig pits, 18x18x12 ins. E and W of post 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

70.00 Leave valley, bears N. and S.

Asc.

Chains

- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 5, 6, 31, and 32, mkd. on brass cap
 T 31 S S 31 in NW.
 R 5 W S 32 in NE.
 R 5 W S 5 in SE.; and
 T 32 S S 5 in SW. quadrants; dig pits, 18x18x12 ins. in each sec. 5½ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
 Land, rolling mountains and valley.
 Soil, sandy loam about 4 ft. deep in valley and about 2 ft. deep on balance of mile.
 No timber.
 Undergrowth, sage and rabbit brush.
 Good grass for grazing.
 Mountainous land or land covered with dense undergrowth,
 80.00 chs.
 June 14, 1911; At this cor. I set off 23°15' N., on the decl. arc; and at 6 h. 0 m. p.m., 1 m.t., I observe the sun on the meridian the resulting lat. is 33°04' N., which is the proper lat. nearly.
-
- West, on a true line bet. secs. 5 and 31
 Over rolling mountainous land; through dense undergrowth
 Asc.
- 15.00 Top of ridge, 100 ft. above cor., bears N. and S.
 Desc.
- 30.00 Bottom of hollow, 75 ft. below ridge, course N.
 Asc.
- 30.30 Road, bears NE and SW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for ¼ sec. cor. mkd. on brass cap ¼ S 31 in N half and S 5 in S half; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

S. bdy. T. 31 S., R. 5 W. - Continued.

Chains

- 57.30 Begin steeper ascent, bears N. and S.
- 82.10 Top of ridge, 300 ft. above hollow, bears N. and S.
Desc.
- 96.00 Bottom of hollow, 75 ft. below ridge, course NE.
Asc.
- 131.00 Intersect W. bdy. of Tp., 6.55 chs. North of the $\frac{1}{2}$ sec. cor. on east side of sec. 36, T. 31 S., R. 6 W., which is an iron post, 1 in. in dia., mkd. and witnessed as described by the surveyor general.
Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for closing cor. of Tps. 31 and 32 S., R. 5 W., mkd. on brass cap
T 31 S R 6 W T 32 S S 36 S 1 in W half.
C-C in E. half.
T 31 S R 5 W S 31 in NE.
T 32 S R 5 W S 6 in SE quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
Note: I destroy all marks on the cor. of Tps. 31 and 32 S., Rs. 5 and 6 which pertain to Tps. 31 and 32 S. R. 5 W. land, mountainous.
Soil, gravelly; and clay about 18 ins. deep.
No timber.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth
131.00 chs.

June 14, 1911.

Boundaries of T.31 S., R.5 W. - Concluded

Latitudes, departures, and closing errors.

Line Designated	Course	Dist- ance	Latitudes		Departures	
			N. chs.	S. chs.	E. chs.	W. chs.
W. bdy.	T.31 S., R.5 W. North	.449.33	449.33			
N. bdy.	T.31 S., R.5 W. N.89°50'E.	.23.41	.07		23.41	
W. bdy.	T.31 S., R.5 W. North	7.86	7.86			
N. bdy.	T.31 S., R.5 W. N.82°30'E.	48.44	6.55		48.03	
N. bdy.	T.31 S., R.5 W. East	198.98			198.98	
N. bdy.	T.31 S., R.5 W. N.89°56'E.	79.25	.09		79.25	
N. bdy.	T.31 S., R.5 W. N.89°59'E.	40.01	.01		40.01	
N. bdy.	T.31 S., R.5 W. N.89°50'E.	59.69	.11		59.69	
N. bdy.	T.31 S., R.5 W. N.89°42'E.	79.55	.42		79.55	
N. bdy.	T.31 S., R.5 W. East	21.84			21.84	
E. bdy.	T.31 S., R.5 W. South	464.63		464.63		
S. bdy.	T.31 S., R.5 W. West	531.00				531.00
Convergency					.57	
Totals			464.22	464.65	531.53	531.00
				<u>464.22</u>	<u>531.00</u>	
Error in lat.				.41		
Error in dep.					.53	

GENERAL DESCRIPTION.

For general description see notes of sub. T.31 S., R.5 W.

Quincy Stewart

U. S. Transitman

June 14, 1911.

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Page

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of transitman see book "P" T.32 S., R.9 E.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18, 1914.

The foregoing field notes of the survey of _____ the South Boundary of Township No. 31 South, Range No. 5 West of the Salt Lake Base and Meridian, Utah, _____

executed by _____ Quinby Stewart _____ under his special instructions dated _____ March 27 _____, 191⁴, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

[Signature]
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____ has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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Page

BOOK A-396

FILED
MAR 29 1911
[Signature]

WR

D.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

of

Township No. 31 South, Range No. 5 West.

Of the Salt Lake Base and Meridian,

in the State of Utah.

EXECUTED BY

John R. Stewart and Quinby Stewart

in the capacity of U. S. ^{Transitmen} ~~Surveyors~~, under instructions dated March 27, 1911, issued by the United States Surveyor General to govern surveys included in Group No. 8, which were approved by the Commissioner of the General Land Office, April 22, 1911, pursuant to authority contained in the Act of Congress dated _____, 1911.

Survey commenced June 14, 1911, 1911

Survey completed June 29, 1911, 1911

Revised 63-13-44 ✓
Average 1-55-11 ✓

CITIZEN BANK

BOOK A-396

INDEX DIAGRAM.

Township 31 South, Range 5 West

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Chains.

Survey commenced June 14, 1911, and executed with a K. and E. transit, No. 20578, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the Surveyor General for Utah, March 20, 1911.

Note: For test of instrument see notes of Panguitch Guide Meridian, T.32 S., bet. Rs. 4 $\frac{1}{2}$ and 5 W., taken June 12, 1911.

June 14: At the cor. of secs. 1, 2, 35 and 36 on S. bdy. of Tp., heretofore described, lat. 38° 04' 17" N.; longitude 112° 21' 10" W., I set off 38° 04' N. on the lat. arc; 23° 16' W. on the decl. arc; and at 3 h 59m p.m. l.m.t., determine a meridian with the solar. Thence I run

N. 0° 01' W. bet. secs. 35 and 36,

Over mountainous land; through scattering timber and undergrowth; ascending abruptly over ledges.

- 1.20 Top of abrupt ascent, 125 ft. above cor., bears E. and W. Ascend more gradually over ledges. Enter heavy timber bearing E. and W.
- 13.15 Top of spur, 500 ft. above cor., bears E. and W. Descend over ledges.
- 17.50 Bottom of hollow, 100 ft. below ridge, course E. Ascend over ledges.
- 25.00 Leave conglomerate ledges, bearing E. and W.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 35 in W. half, and S 36 in E. half; from which
 A pinon pine, 6 ins. dia., bears N. 16° E. 13 lks. dist., mkd. $\frac{1}{4}$ S 36 B T

Sub.T. 31 S.; R. 5 W. - Continued.

Chains.

A cedar, 10 ins. dia., bears N. 53° W. 27 lks.
dist., mkd. $\frac{1}{4}$ S 35 B T

65.00

Top of ridge, 250 ft. above hollow, bears NW. and SE.

Desc.

80.00

Bottom of hollow, 125 ft. below ridge, course NE.

Set an iron post 3 ft. long, 2 ins. in dia., 14 ins. in
the ground, on rock, and surrounded by mound of earth
and stone, for cor. of secs. 25, 26, 35, and 36, mkd. on
brass cap

T 35 S S 26 in NW.

R 5 W S 25 in NE.

S 36 in SE.; and

S 35 in SW. quadrants; from which

A pinon pine, 5 ins. dia., bears N. 77° E. 27 lks.
dist., mkd. T 31 S R 5 W S 25 B T

A mahogany, 4 ins. dia., bears S. 20° 30' E. 55 lks.
dist., mkd. T 31 S R 5 W S 36 B T

A mahogany, 6 ins. dia., bears S. 23° 10' W. 70 lks.
dist., mkd. T 31 S R 5 W S 35 B T

A mahogany, 12 ins. dia., bears N. 43° W. 56 lks.
dist., mkd. T 31 S R 5 W S 26 B T

Land, mountainous and rough.

Soil, red sand and gravel about 8 ins. deep; subsoil,
gravel.

Timber, cedar and pinon pine.

Undergrowth, sage, rabbit brush, and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land 80.00 chs.

June 14, 1911.

June 15: At 8h 0m a.m. l.m.t., I set off 38° 05' N. on the
lat. arc; 23° 18' N. on the decl. arc; and determine a
meridian with the solar at the cor. of secs. 25, 26, 35
and 36. Thence I run

East on a random line bet. secs. 25 and 36,

40.00

Set temp. $\frac{1}{4}$ sec. cor.

80.00

Intersect E. bdy. of Tp. at the cor. of secs. 25, 30, 31 and

Sub.T.51 S.,R.5.W.-Continued.

Chains

36, heretofore described. Thence I run West, on a true line bet. secs. 25 and 36.

Over mountainous land; through scattering timber and dense undergrowth.

Desc.

10.00 Bottom of hollow, 100 ft. below sec. cor., course S.

Asc.

17.60 Top of spur, 150 ft. above hollow, bears N. 80° W. and S. 80° E.

Desc.

19.00 Bottom of hollow, 40 ft. below ridge, course S. 80° E.

Asc.

40.01 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for sec. cor. mkd. on brass cap $\frac{1}{2}$ S 25 in N half and S 36 in S half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

49.00 Top of ridge, 50 ft. above hollow, bears NW and SE.

Desc.

65.00 Bottom of hollow, 150 ft. below ridge, course SE.

Asc. abruptly.

80.02 The cor. of secs. 25, 26, 35, and 36.

Land, mountainous.

Soil, sandy and gravelly; 3rd rate. about 9 ins. deep. subsoil, conglomerated formation.

Timber, cedar and pinon pine.

Undergrowth, sage brush and gahogany.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth

80.02 chs.

N. 0° 01' W., bet. secs. 25 and 26.

Over rolling mountainous land; through dense undergrowth,

Asc. through scattering timber.

5.70 Top of spur, 100 ft. above cor., bears E. and W.

Desc.

Sub.T.31 S.,R.5.W.-Continued.

Chains

- 18.00 Bottom of hollow, 200 ft. below spur, course $S.30^{\circ}W.$
Asc. abruptly.
- 27.00 Leave timber, bears $N. E.$ and $S.80^{\circ}W.$
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of earth, for $\frac{1}{4}$ sec. cor., mkd. on brass cap: S 26 in W half; and S 25 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 70.00 Top of ridge, 400 ft. above hollow, bears $N.70^{\circ}W.$ and $S.70^{\circ}E$
Desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, mkd. on brass cap
T 51 S S 23 in NW.
R 5 W S. 24 in NE.
S 25 in $\overline{SE.}$; and
S 26 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Land, mountainous.
Soil, black gravelly loam about 2 ft. deep.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth
- 80.00 chs.
June 15, 1911: At this cor. I set off $25^{\circ}18'N.$, on the decl. arc; and at 0 h. 10 m. p., 1. m. t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}06'N.$, which is the proper lat. nearly.
- East, on a random line bet. secs. 24 and 25.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.00 Intersect E. bdy. of Tp., at the cor. of secs. 19, 24, 25, and 30 heretofore described. Thence I run
West, on a true line bet. secs. 24 and 25.
Over mountainous land; through dense sage brush.

Chains

Asc. through scattering timber.

5.00 Top of ridge, 50 ft. above cor., bears N. and S.

Desc.

19.00 Bottom of hollow, 100 ft. below ridge, course N. 20° E.

Leave timber, bears NW and SE.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground, for sec. cor. mtd. on brass cap $\frac{1}{2}$ S 24 in N half and S 25 in S half; dig pits, 18x18x12 ins. E. and W. of post 5 ft. dist.; and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. end of cor.

42.00 Begin more abrupt ascent, bears N. and S.

67.00 Top of ridge, 500 ft. above hollow, bears N. and S.

Desc.

80.00 The cor. of secs. 23, 24, 25, and 26.

Land, mountainous.

Soil, gravelly loam; about 18 ins. deep. Subsoil, gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with the dense sage brush

80.00 chs.

June 15, 1911,

June 16, 1911: At 8 h 0 m a.m., l.m.t., I set off 38° 06' N. on the lat. arc; 25° 21' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 23, 24, 25, and 26.

Thence I run

N. 0° 01' W., bet. secs. 23 and 24.

Over mountainous land; through dense undergrowth.

Desc.

18.50 Bottom of hollow, 200 ft. below cor., course NE.

Asc.

37.50 Top of ridge, 150 ft. above hollow, bears NE and SW.

Desc.

Sub. T. 51 S., R. 5 W. - Continued.

Chains

- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 2 sec. cor. mkd. on brass cap S 23 in W half and S 24 in E half; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, mkd. on brass cap
 S 51 S S 14 in NW.
 R 5 W S 13 in NE.
 S 24 in SE.; and
 S 23 in SW. quadrants; and raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor.
- Land, mountainous with long smooth slopes.
 Soil, gravelly and clay loam; about 2 ft. deep.
 No timber.
 Undergrowth, sage and oak and rabbit brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth
- 80.00 chs.
-
- Start, on a random line bet. secs. 13 and 24.
- 40.00 Set temp. 2 sec. cor.
- 79.99 Intersect E. bdy. of Tp., 5 lks. N. of the cor. of secs. 13, 18, 19, and 24, heretofore described.
- Thence I run
 33.00° 53' W., on a true line bet. secs. 13 and 24.
 Over mountainous land; through heavy timber and dense undergrowth.
- Asc.
- 4.00 Top of ridge, 40 ft. above sec. cor., bears N. and S.
 Desc.
- 5.80 Bottom of hollow, 60 ft. below ridge, course N. from W.
 Asc.
- 17.00 Leave hollow, course N., comes from SW.
 Asc.

Chains		
36.00	East fence of old sheep corral, bears N. and S. Leave timber, bears N. and S.	
37.50	West fence of corral, bears N. and S. Enter scattering timber, bears N. and S.	
39.96	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 13 in N half and S 24 in S half; from which A cedar, 3 ins. dia., bears N. 84° W., 188 lks. dist. mkd. $\frac{1}{4}$ S 13 B T. A cedar, 4 ins. dia., bears S. 19° W., 140 lks. dist. mkd. $\frac{1}{4}$ S 24 B T.	
50.00	Top of ridge, 300 ft. above hollow, bears NE and S. 20° W. Desc.	
61.00	Bottom of hollow, 40 ft. below ridge, course NE. Leave timber, bears NE and SW. Asc.	
79.92	The cor. of secs. 13, 14, 23, and 24. Land, mountainous. Soil, red sand and rocky from 1 to 2 ft. deep. subsoil, gravel. Timber, cedar, and pinon pine. Undergrowth, sage and rabbit brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.92 chs. June 16, 1911: At this cor. I set off 23° 21' N., on the decl arc; and at 0 h 1 m p.m. l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 07' N., which is the proper lat. nearly.	
	N. 0° 01' W., bet. secs. 13 and 14. Over rolling mountainous land; through dense undergrowth Desc.	
25.00	Bottom of hollow, 75 ft. below sec. cor., course E. Asc.	
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the	

Sub.T.51 S.,R.5 W.-Continued.

Chains ground, for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 14 in W half
and S 13 in E half;and raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft.high, W.of cor. ✓

75.00 Top of ridge, 150 ft.above hollow, bears E.and W.
Desc.

80.00 Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the
ground, for cor.of secs.:11, 12, 13, and 14, mkd.on brass cap

T 31 S 11 in NW.

R 5 W S 12 in NE.

S 13 in SE.; and

S 14 in SW. quadrants; and raise a mound of stone,
2 ft.base, $1\frac{1}{2}$ ft.high, W.of cor. ✓

Land, mountainous with long smooth slopes.

Soil, red sandy loam and mixed with some rock.about 1 to
3 ft.deep.Subsoil, gravel and rock.

No timber.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense, undergrowth

80.00 chs.

June 16, 1911.

June 17, 1911: At 8 00 a.m., l.m.t., I set off $58^{\circ}08'N.$,
on the lat.arc; $25^{\circ}23'N.$, on the decl.arc; and determine
a meridian with the solar, at the cor.of secs.11, 12, 13,
and 14. ✓

Thence I run

S. $89^{\circ}58'E.$, on a random line bet.secs.12 and 13.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

79.80 Intersect E.bdy.of Tp., at the cor.of secs.7, 12, 13, and
18, heretofore described.

Thence I run

N. $89^{\circ}58'W.$, on a true line bet.secs.12 and 13.

Over mountainous land; through scattering timber and
dense undergrowth.

Desc.

Sub.T.31 S.,R.5 W.-Continued.

Chains	
13.60	Bottom of hollow, 500 ft. below sec. cor., course N. 80° E. Asc.
59.90	Set an iron post, 5 ft. long, 1 ins. in the dia., 12 ins. in the ground, on solid gravel, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mtd. on brass cap $\frac{1}{2}$ S 12 in N half and 3 13 in S half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. ✓
52.60	Top of ridge, 400 ft. above hollow, bears NE and SW. Desc
70.75	Bottom of hollow, 150 ft. below ridge, course NE. Asc.
79.80	The cor. of secs. 11, 12, 13, and 14. ✓ Land, mountainous with long smooth slopes. Soil, red sandy loam mixed with rock, about 12 ins. deep. Timber, cedar and pinon pine. Undergrowth, sage brush and mahogany Good grass for grazing. Mountainous land, or land covered with dense undergrowth 79.80 chs. June 17, 1911: At this cor. I set off 25° 23' N., on the decl arc; and at 0 h 4 m p.m., l.n.t., I observe the sun on the meridian, the resulting lat. is 33° 08' N., which is the proper lat. nearly.
	N. 0° 01' W., bet. secs. 11 and 12. Over mountainous land; through dense undergrowth. and scattering timber. Desc.
14.00	Begin steeper descent, bears E. and W.
24.50	Bottom of hollow, 350 ft. below cor., course N. 70° E. Enter heavy timber, bears same. Asc. abruptly over ledges.
28.40	Top of ridge, 150 ft. above hollow, bears E. and W. Leave ledges, bears E. and W.

Sta. T. 31 S., R. 5 W. - Continued.

Chairs

34.00 Bottom of hollow, 100 ft. below ridge, course B.

Asc. abruptly.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, for $\frac{1}{2}$ sec. cor., on solid rock, and surrounded by mound, of stone, mkd. on brass cap: S 11 in W half and S 12 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, $\frac{1}{2}$ of cor.

50.50 Top of ridge, 500 ft. above hollow, bears NW and SE.

Desc.

60.00 Leave heavy and enter scattering timber, bears NW and SE.

77.00 Bottom of hollow, 100 ft. below ridge, course SE.

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground, on solid gravel, and surrounded by mound of stone, for cor. of secs. 1, 2, 11, and 12, mkd. on brass cap

T 31 S S 2 in NW.

R 5 W S 1 in NE.

S 12 in SE.; and

S 11 in SW. quadrants; from which

A pinon pine, 24 ins. dia., bears N. 3° E., 54 lks.

dist. mkd. T 31 S R 5 W S 1 B T. ✓

A pinon pine, 8 ins. dia., bears S. 80° E., 130 lks.

dist. mkd. T 31 S R 5 W S 12 B T. ✓

A pinon pine, 5 ins. dia., bears S. 29° W., 116 lks.

dist. mkd. T 31 S R 5 W S 11 B T. ✓

A pinon pine, 5 ins. dia., bears N. 22° 30' W., 126 lks.

dist. mkd. T 31 S R 5 W S 2 B T. ✓

Land, mountainous.

Soil, red sandy and rocky, 19 ins. deep, subsoil, gravelly.

Timber, cedar and pinon pine.

Undergrowth, oak and sage brush and mahogany.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

Chains	S. 89° 58' E., on a random line bet. secs. 1 and 12.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.70	Intersect E. bdy. of Tp. 14 1/2 N. of the cor. of secs. 1, 6, 7, and 12, heretofore described.
	Thence I run
	N. 89° 52' W., on a true line bet. secs. 1 and 12.
	Over mountainous land; through heavy timber and scattering undergrowth.
	Asc. along side of hollow.
30.00	Leave heavy and enter scattering timber, bears N. and S.
39.85	Set an iron post, 3 ft. long; 1 ins. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 1 in N half and S 12 in S half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.
	Enter dense undergrowth, bears N. and S.
40.25	Wash, 20 lks. wide, 5 ft. deep, in bottom of hollow, 50 ft. above sec. cor., course NE.
	Asc. abruptly.
51.00	Top of ridge, 125 ft. above hollow, bears N. and S.
	Desc.
55.00	Bottom of same hollow, 50 ft. below ridge, course SE.
	Asc.
72.00	Top of ridge, 200 ft. above hollow, bears NW and SE.
	Desc.
79.70	The cor. of secs. 1, 2, 11, and 12.
	Land, mountainous.
	Soil, red sand and clay mixed with rock about 12 ins. deep subsoil, clay.
	Timber, cedar and pinon pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.70 chs.
	N. 0° 01' W., on a true line bet. secs. 1 and 2.

Sub. T. 31 S., E. 6 W. - Continued.

- 5.00 Over mountainous land; through dense undergrowth and scattering timber.
 Asc.
- 8.00 Top of ridge, 50 ft. above sec. cor., bears NW and SE.
 Desc.
- 19.50 Bottom of hollow, 100 ft. below ridge, course SR.
 Asc.
- 30.00 Top of ridge, 125 ft. above hollow, bears NW and SE.
 Desc.
- 35.00 Bottom of hollow, 50 ft. below ridge, course SE.
 Asc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap. $\frac{1}{2}$ S 2 in. W half and S 1 in. E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, S. of cor.
- 48.00 Top of ridge, 150 ft. above hollow, bears NW and SE.
 Desc.
- 53.00 Begin abrupt descent, bears E. and W.
- 61.00 Creek, 6 ins. wide, 12 ins. deep, in bottom of Big Pine Creek, Canon, 250 ft. below ridge, course E.
 Asc.
- 64.00 Intersect 6th Standard Parallel South, 21.73 chs. N. 89° 42' E. from the Standard cor. of secs. 35 and 36, heretofore described.
 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 1, and 2, mkd. on brass cap T 30 S R 5 W C C S 35 S 36 in N half.
 R 5 W S 1 in SE.; and
 E 31 S S 2 in SE. quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, S. of cor.
- Land, mountainous.
 Soil, red sandy and rocky; 2nd rate. Subsoil, gravel and clay
 Timber, cedar and pinon pine.
 Undergrowth, oak and buck brush.
 Good grass for grazing.

Mountainous land, or land covered with dense undergrowth
64.05 ches. undergrowth; 64.05 ches.

June 17, 1911.

June 19, 1911: At 8 h 1 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat. arc; $25^{\circ}26'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 2, 3, 34, and 35, on south bdy. of tp. heretofore described.

Thence I run

$N.0^{\circ}01'W.$, bet. secs. 34 and 35.

Over mountainous land; through scattering timber and dense undergrowth.

Desc.

2.50 Bottom of hollow, 65 ft. below sec. cor., course $S.10^{\circ}W.$

Asc.

18.65 Top of ridge, 30 ft. above hollow, bears E. and W.

Desc.

1.40 Bottom of hollow, 25 ft. below ridge, course SE.

Asc.

38.60 Top of ridge, 30 ft. above hollow; bears E. and W.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap for S 34 in W half and S 35 in E half; from which

A pinon pine, 10 ins. dia., bears $N.17^{\circ}15'N.$, 12 lks.
dist. mkd. $\frac{1}{2}$ S 35 B. T.

A pinon pine, 8 ins. dia., bears $N.68^{\circ}W.$, 30 lks.
dist. mkd. $\frac{1}{2}$ S 34 B. T.

45.00 Bottom of hollow, 50 ft. below ridge, course $S.30^{\circ}E.$

Asc.

57.00 Ledge 60 ft. high, bears $N.80^{\circ}W.$ and $S.80^{\circ}E.$

65.00 Loose timber, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, mkd. on brass cap

Sub. 1. 31 S., R. 5 W. - Continued.

Chains

T 31 S S 27, in NW.

R 5 W S 26 in NE.

S 35 in SE.; and

S 34 in SW. quadrants; and raise a mound of stone
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous.

Soil, sand and clay; about 16 ins. deep. subsoil gravelly.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,
80.00 chs.

June 19, 1911: At this cor. I set off $25^{\circ}26'N.$, on the decl
are; and at 0 h 1 m p.m., l.m.t., I observe the sun on the
meridian the resulting lat. is $38^{\circ}05'N.$, which is the
proper lat. nearly.

East, on a random line bet. secs. 26 and 35.

40.00 Set temp. $\frac{1}{4}$ sec. cor.80.00 Intersect N. and S. line, 10 lks. N. of the cor. of secs. 25, 26,
35, and 36.

Thence I run

 $N. 89^{\circ}56'W.$, on a true line bet. secs. 26 and 35.Over mountainous land, through scattering timber and
dense undergrowth. Asc.16.40 Top of ridge 150 ft. above hollow, bears $N. 20^{\circ}W.$ & $S. 20^{\circ}E.$

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the
ground, on solid rock, and surrounded by mound of stone,
for $\frac{1}{4}$ sec. cor. - krd. on brass cap $\frac{1}{4}$ S 26 in N half
and S 35 in S half; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

50.00 Bottom of hollow, 150 ft. below ridge, course $S. 20^{\circ}W.$
Asc.

80.00 The cor. of secs. 26, 27, 34, and 35.

Land, rolling mountainous.

Sub.T. 31 S., R. 5 W. - Continued.

Chains

Soil, sandy and rocky about 12 ins. deep. subsoil, hardpan.
 Timber, cedar and pinon pine and mahogany.

Undergrowth, sage brush.

Good grass.

Mountainous land, or land covered with dense undergrowth,
 30.00 chs.

N. 0° 01' W., bet. secs. 26 and 27.

Over mountainous land; through scattering timber and dense
 sage brush.

Asc.

9.00 Top of ridge, 150 ft. above sec. cor., bears N. 80° E. and S. 80°
 W.

Desc.

18.00 Leave timber, bears N. 80° E. and S. 80° W.

21.70 Road, bears E. and W.

22.00 Bottom of hollow, 90 ft. below ridge, course N. 80° E.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the
 ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 27 in W
 half and S 26 in E half; and raise a mound of stone, 2 ft.
 base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

78.00 Top of ridge, 65 ft. above hollow, bears N. 85° W. and S. 85° E.

Desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 13 ins. in the
 ground, on solid rock, and surrounded by mound of stone,
 for cor. of secs. 22, 23, 26, and 27, mkd. on brass cap

T 31 S S 22 in NW.

R. 5 W S 23 in NE.

S 26 in SE.; and

S 27 in SW. quadrants; and raise a mound of stone,
 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

Land, mountainous with gradual smooth slopes to the east.

Timber, cedar and pinon pine.

Soil, gravelly and clay loam about 14 ins. deep. Subsoil
 hardpan.

Sub. 7.51 S. R. 6 W. - Continued.

Chains

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth.
80.00 chn.

June 15, 1911.

June 20, 1911: At N. 1/2 Sec. 22, T. 1 N., R. 6 W., set off $38^{\circ}05' E.$, on the N. 1/2 sec; $20^{\circ}27' N.$, on the Sec. 22; and determine a meridian with the poles at the cor. of secs. 22, 23, 25, and 27.

Thence I run

$3.39^{\circ}56' N.$, on a border line bet. secs. 23 and 25.

40.00 Set temp. sec. cor.

80.04 Intersect N. and S. line, S. 1/2 Sec. 22, N. of the cor. of secs. 23, 24, 25, and 26.

Thence I run

$3.39^{\circ}56' N.$, on a true line between 23 and 25.

Over rolling mountainous land, through dense undergrowth.
Desc.

7.00 Head of hollow, 40 ft. below cor., course $N. 20^{\circ} E.$

Asc.

16.00 Enter scattering timber, bears N. and S.

19.50 Top of ridge, 250 ft. above hollow, bears $N. 70^{\circ} E.$ and $S. 70^{\circ} W.$

Desc.

30.20 Leave timber, bears N. and S.

34.10 Bottom of hollow, 200 ft. below ridge, course SE.

Asc.

40.02 Set an iron post, 3 ft. long, 1 in. in dia., 1 1/2 ins. in the ground, on hard pan, and surrounded by mound of stone, for 1 sec. cor. mkd. on brass cap 1 S 23 in N half and S 26 in S half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor. ✓

45.00 Top of ridge, 300 ft. above hollow, bears $N. 70^{\circ} E.$ and SE.

Desc.

Sub.T.31 S.,R.5 W.-Continued.

Chains

70.20 Bottom of hollow, 200 ft. below ridge, course S. 30° W.

Asc.

80.04 The cor. of secs. 22, 23, 26, and 27.

Land, rolling mountainous.

Soil, gravelly and clay loam about 14 ins. deep, subsoil, hard clay.

Timber, cedar and pinon p. no.

Undergrowth, sage brush.

Good grass.

Mountainous land, or land covered with dense undergrowth,

80.04 chs.

June 20, 1911: At this cor. I set off 25° 27' E., on the decl. arc; and at 6 h 1 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is 33° 06' N., which is the proper lat. nearly.

N. 0° 01' W., bet. secn. 22 and 23.

Over mountainous land; through dense undergrowth.

Desc.

5.00 Head of hollow, 30 ft. below cor., course SE.

Asc.

36.50 Top of ridge, 300 ft. above hollow, bears N. 65° W. and S. 65° E.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for sec. cor. mkd. on brass cap: S 22 in W half and S 23 in E half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

60.75 Bottom of hollow, 100 ft. below ridge, course S. 30° W.

Asc.

64.20 Top of ridge, 200 ft. above hollow, bears N. 35° W., and S. 35° E.

Desc.

78.50 Bottom of hollow, 300 ft. below ridge, course E.

Asc.

80.00 Set an iron post, 3 ft. long, 2 in. in dia., 24 ins. in the ground, for cor. of secn. 14, 15, 22, and 23, mkd. on brass cap

Sub.T.31 S.,R.5 W.--Conti ued.

- Chains T 31 S S 15 in NW.
R 5 W S 14 in NE.
S 23 in SE.;and
S 22 in SW.quadrants;and raise a mound of stone,
2 ft.base,1½ ft.high,W.of cor.
and,rolling mountainous .
Soil,gravelly and clay loam;about 16 ins.deep,subsoil,
hard clay.
No timber.
Undergrowth,sage brush.
Good grass for grazing.
Mountainous land,or land covered with dense undergrowth,
80.00 chs.
- S.89°55'E.,on a random line bet.secs.14 and 23.
- 40.00 Set temp.¼ sec.cor.
- 79.96 Intersect N.and S.line,at the cor.of secs.13,14,23,and
24.
Thence I run
NE89°55'W.,on a true line bet.secs.14 and 25.
Over mountainous land;through dense undergrowth.
Asc.
- 20.00 Begin steeper ascent along south side of hollow.
- 33.25 Begin steeper ascent,bears N.and S.
- 39.98 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
ground,for ¼ sec.cor.mkd.on brass cap ¼ S 14 in N half
and S 23 in S half;and raise a mound of stone,2 ft.
base,1½ ft.high,N.of cor.
- 51.40 Top of ridge,500 ft.above cor.,bears NW.and SE.
Desc.gradually.
- 79.96 The cor.of secs.14,15,22,and 23.
Land,rolling mountainous.
Soil,clay and red sand and rocky.from 1 to 3 ft.deep.
Undergrowth,sage and oak brush.
Good grass for grazing.
No timber.

Sub. E. 31. S., R. 5 W. - Continued.

Chains

Mountainous land, or land covered with dense undergrowth,
79.96 chs.

June 20, 1911.

June 21, 1911: At 8 h 1 m a.m., l.m.t., I set off $38^{\circ}07'N.$,
on the lat. arc; $23^{\circ}28'N.$, on the decl. arc; and determine a
meridian with the solar, at the cor. of secs. 14, 15, 22, and
23. ✓

Thence I run

$N.0^{\circ}01'W.$, bet. secs. 14 and 15.

Over mountainous land; through dense undergrowth.

Asc.

19.00 Top of ridge, 160 ft. above sec. cor., bears $N.85^{\circ}W.$ and $S.85^{\circ}E.$

Desc.

35.00 Bottom of hollow, 50 ft. below ridge, course W.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $S.15$ in W half
and $S.14$ in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$
ft. high, W. of cor.

45.00 Top of ridge, 75 ft. above hollow, bears $N.80^{\circ}W.$ and $S.80^{\circ}E.$

Desc.

80.00 Set an iron post, 5 ft. long, 2 ins. in dia., 24 ins. in the
ground, for cor. of secs. 10, 11, 14, and 15, mkd. on brass cap

$T.31$ $S.8$ $S.10$ in $W.$

$R.5$ $W.8$ $S.11$ in $NE.$

$S.14$ in $SE.$; and

$S.15$ in $SW.$ quadrants; and raise a mound of stone,

2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓

Land, mountainous .

Soil, gravelly and clay. subsoil clay.

No Timber,

Undergrowth, sage brush.

Good grass .

Mountainous land, or land covered with dense undergrowth,

Sub.T.31 S., R.5 W.-Continued.

- Chains 80.00 chs.
 June 21, 1911: At this cor. I set off $23^{\circ}27'N.$, on the decl. arc; and at 0 h 1 m p.m., 11 m.t., I observe the sun on the meridian, the resulting lat. is $30^{\circ}09'N.$, which is the proper lat. nearly.
- S. $89^{\circ}55'E.$, on a random line bet. sec. 11 and 14.
- 40.00 Set temp. sec. cor.
- 80.00 Intersect N. and S. line, 7 lns. S. of the cor. of secs. 11, 12, 13 and 14.
 Thence I run
 S. $89^{\circ}55'E.$, on a true line bet. secs. 11 and 14.
 Over mountainous land; through dense undergrowth.
 Asc.
- 10.00 Top of ridge, 40 ft. above sec. cor. bears N. $30^{\circ}W.$ and S. $30^{\circ}E.$
 Desc.
- 12.50 Bottom of hollow, 30 ft. below ridge, course N.
 Asc.
- 40.00 Set an iron post, 3 ft. long, 1 in in dia., 26 ins. in the ground, for sec. cor. on brass cap; S 11 in N half and S 14 in S half; and raise a mound of stone, 3 ft. base, 1 1/2 ft. high, N. of cor.
- 41.20 Begin steeper ascent, bears N. and S.
- 47.50 Top of steep ascent, bears N. and S.
- 57.70 Top of ridge, 40 ft. above hollow, bears N. $20^{\circ}W.$ and S. $20^{\circ}E.$
 Desc.
- 80.00 The cor. of secs. 10, 11, 14, and 15. 150 ft. below ridge.
 Land, mountainous.
 Soil, gravelly loam; 15 ins. deep.
 No timber.
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth.
 80.00 chs.

Sub.T.31 S., R.5 E.-Continued.

Chains

N.0°01'W., bet. secs. 10 and 11.

Over mountainous land; through dense undergrowth.

Desc.

.30 Bottom of hollow, 7 ft. below sec. cor., course E.

Asc

17.60 Top of ridge, 150 ft. above hollow, bears N.80°W. and S.80°E.

Desc.

52.50 Foot of steep descent, bears N. and E.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for sec. cor. mtd. on brass cap S 10 in W half and S 11 in E half; dig pits, 18x13x12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

42.00 Road, bears NE and SW.

42.40 Bottom of hollow, 60 ft. below ridge, course SW.

Asc.

52.00 Top of ridge, 90 ft. above hollow, bears N.80°E. and S.80°W.

Desc.

62.50 Enter scattering timber, bears N.80°E. and S.80°W.

Bottom of hollow, 180 ft. below ridge, course N.80°E.

Wash, 30 lbs. wide, 10 ft. deep. in bottom.

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 3, 10, and 11. mtd. on brass cap

E 31 S 3 3 in NE.

R 5 S 2 in SE.

S 11 in SW.; and

S 10 in NW. quadrants; and raise a mound of stone,

2 ft. base, 1 1/2 ft. high, W. of cor.

and, mountainous.

Soil, gravelly loam 18 ins. deep. subsoil, gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth.

30.00 chs.

June 21, 1911.

Sub. T. 31 S., R. 5 W. - Continued.

Chains

- June 22, 1911: At 8 h. 1 m. a. m., l. m. t., I set off $38^{\circ}09'N.$, on the lat. arc; $23^{\circ}28'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 2, 5, 10, and 11. Thence I run $S. 89^{\circ}58'E.$, on a random line bet. secs. 2 and 11.
- 40.00 Set a temp. $\frac{1}{2}$ sec. cor.
- 79.98 Fall 7 lks. S. of the cor. of secs. 1, 2, 11, and 12. Thence I run $S. 89^{\circ}59'W.$, on a true line bet. secs. 2 and 11. Over mountainous land; through scattering timber and dense undergrowth, . . . Desc.
- 4.70 Bottom of hollow, 40 ft. below cor., course $S. 50^{\circ}E.$ Asc.
- 3.30 Top of ridge, 150 ft. above hollow, bears $N. 30^{\circ}W.$ and $S. 50^{\circ}E.$ Desc.
- 15.00 Bottom of hollow, 50 ft. below ridge, course S. Asc.
- 31.00 Top of ridge, 200 ft. above hollow, bears $N. 70^{\circ}E.$ and $S. 70^{\circ}W.$ Desc.
- 39.70 Bottom of hollow, 75 ft. below ridge, course $S. 10^{\circ}W.$ Asc.
- 39.99 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., mkd. on brass cap $\frac{1}{2}$ S 2 in N half and S 11 in S half; and raise a mound of stone, 8 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 43.80 Road, bears $N. 75^{\circ}E.$ and $S. 75^{\circ}W.$
- 50.50 Top of ridge, 75 ft. above hollow, bears $N. 70^{\circ}W.$ and $S. 70^{\circ}E.$ Desc.
- 60.05 Bottom of hollow, 400 ft. below ridge, course $S. 10^{\circ}E.$ Asc.
- 64.00 Top of ridge, 75 ft. above hollow, bears $N. 10^{\circ}W.$ and $S. 10^{\circ}E.$ Desc.
- 68.10 Creek, 5 lks. wide, 2 ins. deep, in bottom of canon, 30 ft. below ridge, course $S. 80^{\circ}E.$ Asc.
- 79.98 The cor. of secs. 2, 5, 10, and 11.

Sub.T.31 S., R.5 W.-Continued.

Chains	<p>Land, mountainous.</p> <p>Soil, sandy and gravelly loam; 2nd rate about 16 ins. deep.</p> <p>Timber cedar and pinch pine.</p> <p>Undergrowth, sage brush.</p> <p>Good grass for grazing.</p> <p>Mountainous land, or land covered with dense undergrowth;</p>
79.93 chs.	<p>June 22, 1911: At the noon hour the sky is overcast and solar observations are impossible.</p>
	<p>N. 0° 01' W., bet. secs. 2 and 3.</p>
	<p>Over mountainous land; through dense sage brush and scattering timber.</p>
	<p>Asc.</p>
2.80	<p>Top of ridge, 20 ft. above cor., bears N. 30° W. and S. 30° E.</p>
	<p>Desc.</p>
10.10	<p>Bottom of hollow, 250 ft. below ridge, course S. 30° E.</p>
	<p>Creek, 4 lks. wide, 3 ins. deep, in bottom.</p>
	<p>Asc.</p>
29.00	<p>Road, bears E. and W.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S $\frac{3}{4}$ in W half and S $\frac{2}{3}$ in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.</p>
41.00	<p>Top of ridge, 300 ft. above hollow, bears NW. and SE.</p>
	<p>Desc.</p>
57.20	<p>Creek, 2 lks. wide, 3 ins. deep, in bottom of canon, 400 ft. below ridge, course S. 30° E.</p>
	<p>Asc.</p>
63.86	<p>Intersect 6th Standard Parallel South, 21.40 chs. N. 89° 59' E. of the Standard cor. of secs. 34 and 35, heretofore described.</p>
	<p>Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 2 and 3, mkd. on brass cap C C E 30 S R 5 W S 34 S 35 in E half.</p>

Chains

T 5 W S 5 in SE.; and
T 31 S S 3 in SW. quadrants; from which
A mahogany, 4 inc. dia., bears S. 68° E., 31 lks.
Dist. . . . T 31 S R 5 W S 2 E E.

No other trees within limits; raise a mound of stone,
2 ft. base, 1 1/2 ft. high, S. of cor.

Land, mountainous . . .

Soil, gravelly; 3rd rate. about 14 inc. deep. subsoil, hard
gravel.

Timber, cedar and pinon pine and mahogany.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,
65.60 acs.

June 22, 1911.

Quincy Stewart
U. S. Transitman.

Survey commenced June 18, 1911, and executed with a W. and
L. E. Gurley Explorer's transit No. 957, with solar attachment.
The horizontal limb is provided with two double verniers
placed opposite to each other, reading to single minutes
of arc; which is also the least count of the latitude and
declination arcs.

The instrument was examined, tested on the true meridian at
Salt Lake City, found correct, and was approved by the
surveyor general for Utah, on Mar 29, 1911.

I examine the adjustments of the instrument and correct
the level and collimation errors; then, to test the solar
apparatus by comparing its indications resulting from
solar observations made during p.m. and a.m. hours with a
meridian established by Polaris observation, I proceed
as follows:

Chains

At the cor. of secs. 3, 4, 33, and 34, on S. bdy. of Tp., latitude $38^{\circ}04'17''N.$, longitude $112^{\circ}23'23''W.$, I set off $38^{\circ}04'N.$, on the lat. arc; $23^{\circ}25'N.$, on the decl. arc; and at 4 h 1 m p.m. l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

June 18, 1911.

June 19, 1911: At 1 h 45.9 m a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual and mark a point thereof on a stake driven in the ground, 5.00 chs. N. of the cor.

At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29'$ to the west and mark a point in the meridian thus determined, by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.35 ins. east of the meridian established by the solar.

At 8 h 1 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat. arc; $23^{\circ}26'N.$, on the decl. arc; and mark the meridian determined by the solar by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.31 ins. east of the meridian established by Polaris observation; then

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0'18''$ west and $0'16''$ east of the meridian established by Polaris observation therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m., is $N.16^{\circ}15'W.$; the angle thus determined gives the mag. decl. $16^{\circ}15'E.$

From the cor. of secs. 3, 4, 33, and 34, on S. bdy. of T. par. ab. heretofore described, I run

Sub.T.31 S.,R.5 W.-Continued:

Chains

N.0°0 2'W.bet.secs.33 and 34.

Over mountainous land,through dense sage brush.

Desc.

6.30 Road to Fremont Canon,bears N.80°W.and S.80°E.

6.70 Bottom of hollow,80 ft.below sec.cor.,course S.80°E.

Asc.

20.00 Top of ridge,100 ft.above hollow,bears N.80°W.and S.80°E.

Desc.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for 1/2 sec.cor.,mkd.on brass cap S 33 in W half and S 34 in E half;and dig pits,18x18x12 ins.N.and S. of post,3 ft.dist.and raise a mound of earth,3 1/2 ft.base 1 1/2 ft.high,W.of cor.

44.20 Bottom of hollow,140 ft below ridge,course E.

Asc.

61.30 Top of ridge,80 ft.above hollow,bears N.75°E.and S.75°W.

Desc.

70.00 Bottom of hollow,50 ft.below ridge,course W.

Asc.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,12 ins.in the ground,on rock,and surrouned by mound of earth and stone,for cor.of secs.27,28,33,and 34,mkd.on brass cap

T 31 S S 28 in NW.

R 5 W S 27 in NE.

S 34 in SE.;and

S 33 in SW.quadrants;and raise a mound of stone,

2 ft.base,1 1/2 ft.high,W.of cor.

Land,mountainous gradual slopes.

Soil,gravelly loam;2nd rate and clay 3rd rate.about 1 ft. deep.subsoil,clay .

No timber.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,

80.00 chs.

June 19,1911:At this cor.I set off 23°26'N.,on the decl.

Sub.T.31 S.,R.5 W.--Continued.

Chains	arc;and at 0 h 1 m p.m.,1.m.t.,I observe the sun on the meridian the resulting lat.is 38°05'N.,which is the proper lat.nearly.
	East,on a random line bet.secs.27 and 34.
40.00	Set temp. sec.cor.
80.08	Intersect N.and S.line,at the cor.of secs.26,27,and 34, and 35.
	Thence. I run
	West,on a true line bet.secs.27 and 34.
	Over mountainous land;through dense undergrowth,.
	Asc.
25.00	Top of ridge,200 ft.above sec.cor.,bears NE and SW.
	Desc.
34.00	Enter heavy timber,bears NE and SW.
	Enter ledges,bears NE and SW.
37.00	Leave ledges and timber,bears NW and SE.
40.04	Set an iron post,3 ft.long,1 in in dia.,26 ins.in the ground,for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 27 in N half and S 34 in S half;dig pits,18x12x12 ins.E.and W.of post, 3 ft.dist.;and raise a mound of earth. $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft. high,N.of cor.
45.00	Bottom of hollow,150 ft.below ridge,course SW.
	Asc.
65.00	Begin steeper ascent,bears NE and SW. over ledges.
70.00	Leave ledges,bears N.and S.
77.00	Top of ridge,125 ft.above hollow,bears N.and S.
	Desc.
80.08	The cor.of secs.27,28,33,and 34.
	Land,mountainous.
	Soil,red sand and gravelly about 3 ft.deep in swales and and 1 ft.deep.on ridges.
	Timber,cedar ,pinon pine,and mahogany.
	Undergrowth,sage,oak,and rabbit brush.
	Good grass for grazing.

Sub.T.31 S.,R.5 W.-Continued.

Chains	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.08 chs.
	N.0°02'W., bet. secs. 27 and 28. Over mountainous land; through dense undergrowth. Asc.
6.35	Top of ridge, 60 ft. above cor., bears N.80°E. and S.80°W. Desc.
9.45	Bottom of hollow, 80 ft. below ridge, course S.60°W. Asc.
30.00	Enter scattering timber, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 28 in W half and S 27 in E half; dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.
45.00	Ascend abruptly over ledges, bears N.85°E. and S.85°W.
57.20	Leave ledges, bears N.85°E. and S.85°W.
61.20	Top of ridge, 200 ft. above hollow; bears N.80°E. and S.80°W. Desc.
75.00	Leave timber, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 21, 22, 27, and 28. mkd. on brass cap T 31 S S 21 in NW. R 5 W S 22 in NE. S 27 in SE.; and S 28 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Land, mountainous. Soil, gravelly and rocky; 2nd rate. about 1 to 2 ft. deep. subsoil clay and gravel. Timber, cedar and pinon pine. Undergrowth, sage brush. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.00 chs.

Chains

June 19, 1911.

June 20, 1911: At 8 h 1 m a.m., l.m.t., I set off $38^{\circ}06'N.$, on the lat.arc; $23^{\circ}27'N.$, on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 21, 22, 27, and 28.

Thence I run

East, on a random line bet. secs. 22 and 27.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect N. and S. line, 2 lks. N. of the cor. of secs. 22, 23, 26, and 27.

Thence I run

$N.89^{\circ}59'W.$, on a true line bet. secs. 22 and 27.

Over mountainous land; through dense undergrowth.

Asc.

26.20 Top of ridge, 200 ft. above sec. cor., bears $N.20^{\circ}E.$ and $S.20^{\circ}W.$

Desc.

39.99 Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 22 in. N half and S 27 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

41.00 Bottom of hollow, 200 ft. below ridge, course $S.10^{\circ}E.$

Asc.

54.00 Top of ridge, 250 ft. above hollow, bears $N.10^{\circ}W.$ and $S.10^{\circ}E.$

Desc.

64.50 Bottom of hollow, 180 ft. below ridge, course SE.

Asc.

78.30 Top of ridge, 200 ft. above hollow, bears N. and S.

Desc.

79.98 The cor. of secs. 21, 22, 27, and 28.

Land, mountain us .

Soil, gravelly loam; 2nd rate. 2 ft. deep.

Chains

No Timber,

Undergrowth, sage brush. and oak.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

79.98 chs.

June 20, 1911: At this cor. I set off 23°27'N., on the decl. arc; and at 0 h 1 m p.m.; 1.m.t., I observe the sun on the meridian, the resulting lat. is 38°06'N., which is the proper lat. nearly.

N. 0°02'W., bet. secs. 21 and 22.

Over mountainous land; through dense undergrowth.

Desc.

18.50 Bottom of hollow, 140 ft. below cor., course N. 60°W.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 13 ins. in the ground, on hard pan, and surrounded by mound of earth and stone, for 1/2 sec. cor. mkd. on brass cap 1/4 S 21 in W half and S 22 in E half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

48.30 Top of ridge, 130 ft above hollow, bears N. 75°E. and S. 75°W.

Desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 15, 16, 21, and 22, mkd. on brass cap

T 31 S S 16 in NW.

R 5 W S 15 in NE.

S 22 in SE. land

S 21 in SW. quadrants; dig pits, 18x18x12 ins. in

each sec. 5 1/2 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous

Soil, sandy and gravelly loam; 2nd rate. subsoil hard clay and rock.

No timber.

Undergrowth, sage brush.

Good grass for grazing.

Sub.T.31 S.,R.5 W.-Continued.

Chains		
	Mountainous land, or land covered with dense undergrowth, 80.00 chs.	
	S.89°59'E., on a random line bet. secs. 15 and 22.	
40.00	Set temp. $\frac{1}{4}$ sec. cor.	
80.00	Intersect N. and S. line of 20 lks. N. of cor. of secs. 14, 15, 22 & 23. Thence I run	
	N.89°54'W., on a true line bet. secs. 15 and 22. Over mountainous land; through dense undergrowth.	
	Asc.	
22.00	Top of ridge, 150 ft. above sec. cor., bears N. and S. Desc.	
26.80	Bottom of hollow, 40 ft. below ridge, course N. Asc.	
40.00	Set an iron post, 3 ft. long, 1 in in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 15 in N half and S 22 in S half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.	
41.00	Top of ridge, 75 ft. above hollow, bears N. and S. desc..	
58.00	Bottom of hollow, 200 ft. below ridge, course NW. Asc.	
68.60	Top of ridge, 100 ft. above hollow, bears N. and S. Desc.	
80.00	The cor. of secs. 15, 16, 21, and 22. 150 ft. below ridge, Land, mountainous Soil, red sand and rocky about 3 ft. deep. No timber. Undergrowth, sage rabbit brush, service berry, and patches of aspen sapplings. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 80.00 chs.	

June 20, 1911.

Sub.T.31 S.,R.5 W.-Continued.

Chains

June 21,1911:At 8 h 1 m a.m.l.m.t.,I set off 38°07'N., on the lat.arc;25°28'N.,on the decl.arc;and determine a meridian with the solaz,at the cor.of secs.15,16,21,and 22.

Thence I run

N.0°02'W.,bet.secs.15 and 16.

Over mountainous land;through dense undergrowth.

Desc.

5.00 Edge of old lake bed,enter Upper Dog Valley,bears E.and W.

27.00 Leave old lake bed,bears E.and W.

33.20 Fence,bears E.and W.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for 1/2 sec.cor..mkd.on brass cap 1/4 S 16 in W half and S 15 in E half;dig pits,18x18x12 ins.N.and S.of post, 3 ft.dist.;and raise a mound of earth,3 1/2 ft.base,1 1/2 ft. high,W.of cor.

45.30 Road,bears NE and SW.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.9,10,15,and 16,mkd.on brass cap

T 31 S S 9 in NW:

R 5 W S 10 in NE.

S 15 in SE.;and

S 16 in SW.quadrants;dig pits,18x18x12 ins.in

each sec.5 1/2 ft.dist.;and raise a mound of earth,4 ft. base,2 ft.high,W.of cor.

Land,mountainous and level valley.

Soil,sandy loam except in lake bed which is clay.

No timber.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth.

80.00 chs.

S.89°54'E.,on a random line bet.secs.10 and 15.

Chains

- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 79.90 Intersect N. and S. line, 10 lks. S. of the cor. of secs. 10, 11, 14, and 15.
 Thence I run
 N. $89^{\circ}58'$ W., on a true line bet. secs. 10 and 15.
 Over mountainous land; through dense undergrowth.
 Desc.
- 5.75 Bottom of hollow, 100 ft. below cor., course NW.
 Asc.
- 17.30 Top of ridge, 75 ft. above hollow, bears N. and S.
 Desc.
- 22.00 Enter Upper Dog Valley, bears N. and S.
- 39.95 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 10 in N half and S 15 in S half; dig pits, 18 x 18 x 12 ins. E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 47.00 Road, bears NE and SW.
- 79.90 The cor. of secs. 9, 10, 15, and 16.
 Land, rolling mountainous and valley.
 Soil, clay about 2 ft. deep, subsoil, hard clay.
 No timber.
 Undergrowth, sage brush.
 Good grass :
 Mountainous land, or land covered with dense undergrowth,
 79.90 chs.
 June 21, 1911: At the noon hour the sky is overcast and solar observations are impossible.
- N. $0^{\circ}02'$ W., bet. secs. 9 and 10.
 Over nearly level valley through dense undergrowth..
- 7.50 Leave Dog Valley, bears N. and S.
- 23.00 Top of ridge, 50 ft. above valley, bears N. 70° W. and S. 70° E.
 Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the

Sub.T.31 S.,R.5 W.-Continued.

- Chains
 ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 9 in W half
 and S 10 in E half; and raise a mound of stone, 2 ft. base,
 $1\frac{1}{2}$ ft. high, W. of cor.
- 42.80 Bottom of hollow, 40 ft. below ridge, course S.60°E.
 Asc.
- 60.00 Top of ridge, 45 ft. above hollow, bears NW and SE.
 Desc.
- 66.00 Bottom of hollow, 30 ft. below ridge, course S.35°E.
 Asc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
 ground, for cor. of secs. 3, 4, 9, and 10, mkd. on brass cap
 T 31 S S 4 in NW.
 R 5 W S 3 in NE.
 S 10 in SE.; and
 S 9 in SW quadrants; and raise a mound of stone,
 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Land, mountainous .
 Soil, sandy and clay loam; 2nd rate. about 18 ins. deep.
 No timber.
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous land; or land covered with dense undergrowth,
 80.00 chs.

June 21, 1911.

- June 22, 1911: At 8 h 2 m a.m., l.m.t., I set off 38°09'N.,
 on the lat. arc; 23°28'W., on the decl. arc; and determine a
 meridian with the solat, at the cor. of secs. 3, 4, 9, and 10.
 Thence I run
 S. 89°58'E., on a random line bet. secs. 3. and 10.
- 40.00 Set temp. $\frac{1}{4}$ Sec. cor. mkd. on brass cap
- 79.96 Intersect N. and S. line, at the cor. of secs. 2, 3, 10, and 11.
 Thence I run
 N. 89°58'W., on a true line bet. secs. 3 and 10.
 Over mountainous land; through dense sage brush.

Sub.T.31 S.,R.5 W.-Continued.

Chains	Asc.along side of hollow.
34.80	Bottom of hollow,course S.60°E. Asc.
39.98	Set an iron post,3 ft.long,1 in.in dia.,20 ins.in the ground,on rock,and surrounded by mound of stone,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 3 in N half and S 10 in S half and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft.high,N.of cor.
65.00	Top of ridge,130 ft.above hollow,bears NW and SE. Desc.
79.96	The cor.of secs.3,4,9,and 10,110 ft.below ridge, Land,mountainous . Soil,red clay and gravel about 2 ft.deep,subsoil clay. No timber. Undergrowth,sage brush. Good grass . Mountainous land,or land covered with dense undergrowth, 79.96 chs. June 22,1911:At this cor.I set off 23°27'N.,on the decl. arc;and at 0 h 2 m.p.m.,1.m.t.,I observe the sun on the meridian,the resulting lat.is 38°09'N.,which is the proper lat.nearly. <hr/> N.0°02'W.,on a true line bet.secs.3 and 4. Over mountainous land;through dense undergrowth. Asc.
20.00	Top of ridge,75 ft.above hor.,bears NW and SE. Desc
33.50	Bottom of hollow,65 ft.below ridge,course SE. Asc.
40.00	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 4 in W half and S 3 in E half;and raise a mound of stone,2 ft.base, $1\frac{1}{2}$ ft. high,W.of cor.
45.10	Top of ridge,80 ft.above hollow,bears E.and W. Desc.

Sub.T.31 S.,R.5 W.-Continued.

Chains

- 46.50 Enter scattering timber, bears E. and W.
- 54.45 Creek, 3 lks. wide, 2 ins. deep, in bottom of canon, 300 ft. below ridge, course E.
Asc.
- 56.00 Leave timber, bears E. and W.
- 63.76 Intersect 6th Standard Parallel South, 20.60 chs. N. 89° 56' E., of the standard cor. of secs. 33 and 34, heretofore described.
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 3 and 4, mkd. on brass cap
C C T 30 S R 5 W S 33 S 34 in N half.
R 5 W S 3 in SE.; and
T 31 S S 4 in SW. quadrants; and raise amount of stone, 2 ft. base, 1½ ft. high, S. of cor.
Land, mountainous .
Soil, gravelly and clay loam from 1 to 2 ft. deep. subsoil clay.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass
Mountainous land, or land covered with dense undergrowth,
63.76 chs. June 22, 1911.
John Stewart
U. S. Transitman.
- June 23, 1911. At 8 h' 2 m a. m., 1. m. t., I set off 38° 04' N., on the lat. arc; 23° 28' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 4, 5, 32, and 33, on S. bdy. of Tp., heretofore described.
Thence I run
N. 0° 03' W., bet. secs. 32 and 33.
Over mountainous land, through dense undergrowth.
Desc.
- 10.00 Enter valley (called Dog Valley), bears E. and W.
Dam at east end of small reservoir containing about one

Sub.T.31 S.,R.5 W.--Continued .

- Chains half acre; used for watering sheep..
- 35.00 Leave valley, ascend knoll, bears E. and W.
- 40.00 Top of knoll, 50 ft. high,
- Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 32 in W half and S 33 in E. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Desc.
- 47.10 Foot of knoll, bears E. and W.
- Road to Fremont Canon, bears N. 80° W. and S. 80° E.
- Enter valley.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 28, 29, 32, and 33, mkd. on brass cap
- T 31 S S 29 in NW.
- R 5 W S 28 in NE.
- S 33 in SE.; and
- S 32 in SW quadrants; and dig pits, 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- Land, level and mountainous .
- Soil, red sand 4 ft deep. subsoil, clay.
- No timber.
- Undergrowth, sage brush.
- Good grass for grazing
- Mountainous land, or land covered with dense undergrowth, 80.00 chs.
- East, on a random line bet. secs. 28 and 33 .
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.06 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 27, 28, 33, and 34.
- Thence I run
- N. 89° 55' W., on a true line bet. secs. 28 and 33.
- Over mountainous land; through dense undergrowth.
- Desc.
- 6.00 Foot of steep descent, bears N. and S.
- 24.00 Bottom of hollow, 100 ft. below sec. cor., course SW.
- Asc.

Sub. T. 31 S., R. 5 W. -Continued.

Chains

- 40.03 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 28 in N half and S 33, in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 47.00 Top of ridge, 60 ft. above hollow, bears N. and S.
Desc.
- 55.00 Foot of descent, bears N. and S.
Enter Dog Valley.
- 57.64 Road, bears N. and S.
- 80.06 The cor. of secs. 28, 29, 32, and 33.
Land, mountainous and valley,
Soil, red sandy loam in valley 4 ft. deep, gravelly on mountainous land.
No timber.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth,
80.06 chs.
June 23, 1911: At this cor. I set off $23^{\circ}27'N.$, on the decl. arc; and at 0 h. 2 m. p.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}05'N.$, which is the proper lat. nearly.
- $N.0^{\circ}03'W.$, bet. secs. 28 and 29.
Over valley land; through dense undergrowth.
Asc. gently.
- 10.00 Begin ascent of knoll, bears E. and W.
- 17.60 Top of knoll 100 ft. above cor.,
Desc.
- 25.00 Bottom of hollow, 100 ft. below knoll, course SW.
Enter Dog Valley.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 29 in W half and S 28 in E half; dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base,

Sub.T.31 S.,R.5 W.-Continued.

Chains

1½ ft.high,W.of cor.

47.60 Wash,12 lks.wide,3 ft.deep,course W.

67.85 Road,bears NE and SW.

77.00 Leave valley,bears NE and SW.

Asc.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.20,21,28,and 29,mkd.oh brass cap

T 31 S S 20 in NW.

R 5 W S 21 in NE.

S 28 in SE.;and

S 29 in SW.quadrants; and raise a mound of stone,

2 ft.base,1½ ft.high,W.of cor.

Land,rolling mountainous land and nearly level valley.

Soil,sandy loam about 4 ft.deep.subsoil,clay.

No timber,.

Undergrowth,sage brush.

Good grass .

Mountainous land,or land covered with dense undergrowth,

80.00 chs.

June 23,1911.

June 24,1911:At 8 h 2 m a.m.,l.m.t.,I set off 38°06'N. on the lat.arc;23°28'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.20,21,28,and 29.

Thence I run

S.89°55'E.,on a random line bet.secs.21 and 28.

40.00 Set temp.¼ sec.cor.

80.10 Intersect N.and S.line,16 lks.S.of the cor.of secs.21,22, 27,and 28.

Thence I run

S.89°58'W.,on a true line bet.secs.21 and 28.

Over mountainous land,through dense undergrowth.

Desc.

2.50 Bottom of hollow,40 ft.below sec.cor.,course N.

Asc.

Sub.T.31 S.,R.5 W.-Continued.

Chains

- 10.00 Top of ridge, 75 ft. above hollow, bears N. and S.
Desc.
- 40.05 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 21 in N half and S 28 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 55.00 Foot of ridge, 400 ft. below ridge, bears N. and S.
Enter Dog Valley.
- 57.50 Road, bears N. and S.
- 57.65 Wash, 40 lks. wide, 3 ft. deep, course S.
- 71.30 Wash, 40 lks. wide, 3 ft. deep, course SW. Road bears N. 30° E. and S. 30° W.
- 77.00 Leave valley, bears NE and SW. (Dog Valley).
Asc.
- 80.10 The cor. of secs. 20, 21, 28, and 29.
Land, mountainous and valley.
Soil, red sandy and gravelly from 1 to 3 ft. deep, subsoil, clay and gravel.
No timber.
Undergrowth, sage brush.
Good grass.
Mountainous land, or land covered with dense undergrowth,
80.10 chs.
N. 0° 03' W., bet. secs. 20 and 21.
Over mountainous land; through dense undergrowth.
Asc.
- 25.00 Top of ridge, 300 ft. above cor., bears NE and SW.
Desc.
- 33.00 Bottom of hollow, 75 ft. below ridge, course SW.
Asc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 20 in W half and S 21 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 52.00 Top of ridge, 200 ft. above hollow, bears NE and SW.
Desc.

Sub.T.31 S.,R.5 W.-Continued.

Chains

60.50 Head of hollow, 50 ft. below ridge, course W.

Asc.

70.00 Top of ridge, 150 ft. above hollow, bears NW and SE.

Desc.

73.70 Desc more abruptly, bears NW and SE.

Enter dense aspen sapplings.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, mkd. on brass cap

T 31 S S 17 in NW.

R 5 W S 16 in NE.

S 21 in SE.; and

S 20 in SW. quadrants; and dig pits, 18x18x12 ins.

in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, $4\frac{1}{2}$ ft. base, 2 ft. high, W. of cor.

Land, mountainous .

Soil, gravelly, and red sandy loam; about 18 ins. deep.

No timber.

Undergrowth, sage-brush and patches of dense aspen sapplings

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth.

80.00 chs.

June 24, 1911: At this cor. I set off $23^{\circ}26'N.$, on the decl. arc; and at 0 h 2 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}00'N.$, which is the proper lat. nearly.

$N.89^{\circ}58'E.$, on a random line bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.14 Intersect N. and S. line, at the cor. of secs. 15, 16, 21, and 22.

Thence I run

$S.89^{\circ}58'W.$, on a true line bet. secs. 16 and 21.

Over mountainous land; through dense undergrowth.

Desc.

1.50 Bottom of hollow, 20 ft. below sec. cor., course N.

Asc.

Chains

- 16.00 Top of ridge, 200 ft. above hollow, bears N. and S.
Des. abruptly.
- 31.00 Foot of abrupt descent, bears N. and S.
- 40.07 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 16 in N half and S 22 in S half; dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.
- 47.00 Wash, 60 lks. wide, in bottom of canon, 300 ft. below ridge, course S.
Creek, 3 lks. wide, 1 in. deep, in bottom.
Asc.
- 47.50 Road, bears N. 10° E. and S. 10° W.
- 65.00 Top of ridge, 300 ft. above canon, bears NW and SE.
Desc.
- 75.00 Bottom of hollow, 80 ft. below ridge, course SE.
Asc.
- 80.14 The cor. of secs. 16, 17, 20, and 21.
Land, mountainous.
Soil, sandy loam; from 1 to 3 ft. deep.
No timber.
Undergrowth, sage brush, oak, and patches of aspen sapplings.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth,
80.14 chs.

June 24, 1911.

G. S. S.

June 26, 1911: At 8 h 2 m a.m.; 1 m. t., I set off 38° 07' N., on the lat. arc; 23° 24' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 16, 17, 20, and 21.

Thence I run

N. 0° 03' W., bet. secs. 16 and 17.

Over mountainous land; through dense undergrowth.

Asc.

Sub.T.31 S.,R.5 W.- Continued.

Chains

12.50 Top of ridge, 200 ft. above cor., bears E. and W.

Desc.

19.75 Bottom of hollow, 150 ft. below ridge, course E.

Asc.

40.00 Top of ridge, 250 ft. above hollow, bears N. 85° E. and S. 85° W.

Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, in rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 17 in W half and S 16 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Desc.

54.00 Bottom of hollow, 50 ft. below ridge, course S. 80° E.

Asc.

62.00 Top of ridge, 150 ft. above hollow, bears N. 70° W. and S. 70° E.

Desc.

69.20 Bottom of hollow, 200 ft. below ridge, course S. 60° E.

Asc.

76.90 Top of ridge, 160 ft. above hollow, bears N. 80° W. and S. 60° E.

Desc. through scattering timber.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground; for cor. of secs. 8, 9, 16, and 17, mkd. on brass cap

T 31 S S 8 in NW.

R 5 W S 9 in NE.

S 16 in SE.; and

S 17 in SW. quadrants; from which

A pine, 6 ins. dia., bears N. 15° E., 74 lks.

dist. mkd. T 31 S R 5 W S 9 B T.

An aspen, 6 ins. dia., bears S. 45° E., 80 lks.

dist. mkd. T 31 S., R. 5 W. S 16 B T.

A pine, 24 ins. dia., bears S. 64° W., 167 lks.

dist. mkd. T 31 S R 5 W S 17 B T.

A cedar, 48 ins. dia., bears N. 59° W., 249 lks.

dist. mkd. T 31 S R 5 W S 8 B T.

Land, mountainous.

Soil, clay and gravelly loam from 1 to 2 ft. deep. subsoil clay.

Timber, pine, aspen and cedar.

Undergrowth, sage and oak brush.

Sub.T.31 S.,R.5 W.-Continued.

Chains

- Good grass for grazing.
- Mountainous land, or land covered with dense undergrowth,
80.00 chs.
- June 26, 1911: At this cor. I set off $23^{\circ}24'N.$, on the decl. arc; and at 0 h 2 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}008'N.$, which is the proper lat. nearly.
- N. $89^{\circ}58'E.$, on a random line bet. secs. 9 and 16.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.20 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 9, 10, 15, and 16.
- Thence I run, over Upper Dog Valley,
West, on a true line bet. secs. 9 and 16.
Over level valley, and through dense undergrowth.
- Asc. gently.
- 24.40 Road, bears N. $10^{\circ}W.$ and S. $10^{\circ}E.$
- 40.10 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 9 in N half and S 16 in S half; dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- Leave valley, bears N. and S.
- Asc.
- 61.50 Top of ridge, 350 ft. above valley, bears N. $50^{\circ}W.$ and S. $50^{\circ}E.$
- Desc.
- 77.50 Bottom of canon, 450 ft. below ridge, course S. $55^{\circ}E.$
- Asc.
- 80.20 The cor. of secs. 8, 9, 16, and 17.
- Land, rolling and mountainous . . .
- Soil, sandy and clay; 2nd rate. 1 to 2 ft. deep.
- No timber.
- Undergrowth, sage brush and rabbit brush in valley and sage and oak brush on mountain.
- Good grass for grazing.
- Mountainous land, or land covered with dense undergrowth,

Chains

80.20 chs.

N.0°03'W.,bet.secs.8 and 9.

Over mountainous land;through dense undergrowth.,and scattering timber.

Desc.

6.00 Ledge,20 ft.high,bears E.and W.

8.90 Bottom of canon,430 ft.below sec.cor.,course S.20°E.
Creek,3 lks.wide,1 in.deep,in bottom.

Asc.

18.75 Ledge,20 ft.high,bears N.80°E.and S.80°W.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
ground,for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 8 in W half
and S 9 in E half;from whichAn aspen,4 ins.dia.,bears S.45°E.,8 lks.
dist..mkd. $\frac{1}{2}$ S 9 B T.An aspen,4 ins.dia.,bears N.70°W.,30 lks.
dist..mkd. $\frac{1}{2}$ S 8 B T.

70.00 Top of ridge,500 ft.above canon,bears NE and SW.

Desc.

80.00 Set an iron post,3 ft.long,1 in.in dia.,24 ins.in the
ground,for cor.of secs.4,5,and 8,and 9,mkd.on brass cap
T 31 S S 5 in NW.

R 5 W S 4 in NE.

S 9 in SE.;and

S 8 in SW.quadrants;from which

A white pine,16 ins.dia.,bears N.16°E.,7 lks.
dist..mkd.T 31 S R 5 W S 4 B T.A n aspen,4 ins.dia.,bears S.10°E.,45 lks.
dist..mkd.T 31 S R 5 W S 9 B T.An aspen,4 ins.dia.,bears S.45°W.,30 lks.
dist..mkd.T 31 S R 5 W S 8 B T.An aspen,4 ins.dia.,bears N.75°W.,24 lks.
dist..mkd.T 31 S R 5 W S 5 B T.

Land,mountainous slopes and drains southwest.

Soil,clay and gravelly loam;2nd rate,about 18 ins.deep.

Timber,aspen and pine.

Sub.T.31 S.,R.5 W.-Continued.

Chains

Undergrowth, sage and oak brush.

Good grass.

Mountainous land, or land covered with dense undergrowth.

80.00 chs.

June 26, 1911.

June 27, 1911: At 8 h 2 m a.m., l.m.t., I set off $38^{\circ}09'N.$, on the lat. arc; $23^{\circ}22'N.$, on the decl. arc; and determine a meridian with the solat, at the cor. of secs. 4, 5, 8, and 9.

Thence I run

East, on a random line bet. secs. 4 and 9.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.30 Intersect N. and S. line, 12 olks. S. of the cor. of secs. 3, 4, 9, and 10.

Thence I run

S. $89^{\circ}55'W.$, on a true line bet. secs. 4 and 9.

Over mountainous land, through dense undergrowth and scattering timber.

Asc.

17.00 Top of ridge, 40 ft. above cor., bears $N.10^{\circ}W.$ and $S.10^{\circ}E.$

Desc.

38.50 Bottom of hollow, 100 ft. below ridge, course $S.10^{\circ}E.$

Asc.

40.15 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 4 in N half and S 9 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

45.00 Enter heavy timber, bears N. and S.

78.25 Ledge, 30 ft. high, bears N. and S.

80.30 The cor. of secs. 4, 5, 8, and 9.

Land, mountainous.

Soil, sandy and red clay, subsoil, clay.

Timber, pine, aspen and cedar.

Undergrowth, sage and oak brush.

Good grass for grazing.

Chains

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.30 chs.

June 27, 1911: At this cor. I set off $23^{\circ}23'N.$, on the decl. arc; and at 0 h 2 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}09'N.$, which is the proper lat. nearly.

$N. 0^{\circ}03'W.$, bet. secs. 4 and 5.

Over mountainous land; through scattering timber and dense undergrowth.

Desc.

2.85 Bottom of hollow, 250 ft. below sec. cor., course $N. 80^{\circ}E.$

Asc.

15.00 Top of ridge, 85 ft. above hollow, bears E. and W.

Desc.

28.90 Bottom of hollow, 250 ft. below ridge, course $S. 35^{\circ}E.$

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 5 in W half and S 4 in E half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

44.10 Top of ridge, 375 ft. above hollow, bears $N. 80^{\circ}W.$ and $S. 80^{\circ}E.$

Desc.

47.20 Bottom of hollow, 100 ft. below ridge, course E.

Asc.

64.00 Intersect 6th Standard Parallel South, 19.46 chs. East of the Standard cor. of secs. 32 and 33, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 4 and 5, mkd. on brass cap

C C T 30 S R 5 W S 32 S 33 in N half

R 5 W S 4 in SE; and

T 31 S S 5 in SW quadrants; from which

An aspen, 4 ins. dia., bears $S. 20^{\circ}E.$, 22 lks.

dist. mkd. T 31 S R 5 W S 4 B T.

An aspen, 6 ins. dia., bears $S. 70^{\circ}W.$, 32 lks.

dist. mkd. T 31 S R 5 W S 5 B T.

Sub.T.31 S.,R.5 W.-Continued.

Chains

Land mountainous.

Soil, gravelly and clay; 2nd rate about 1 ft. deep.

Timber, cedar, pinon pine, aspen and pine.

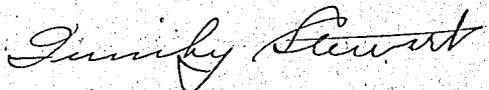
Undergrowth, oak, sage, and aspen sapplings.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

64.00 chs.

June 27, 1911.



U.S. Transitman.

June 23, 1911, At 8 h. 02 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat. arc; $23^{\circ}28'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 5, 6, 31, and 32, on S. bdy. of Tp., heretofore described. Thence I run $N. 0^{\circ}03'W.$, bet. secs. 31, and 32.

Over mountainous land, through dense undergrowth.

Desc.

20.00 Foot of descent, 50 ft. below cor., bears E. and W.

Enter Dog Valley.

33.00 Road to Fremont Canon, bears NW and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 31 in W half; and S 32 in W half; dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

78.85 Road, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 29, 30, 31, and 32, mkd. on brass cap

T 31 S S 30 in NW.

R 5 W S 29 in NE.

S 32 in SE; and

S 31 in SW quadrants; and dig pits, 18x18x12 ins., 1

each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base

Sub.T.31 S.,R.5 W.-Continued-

Chains

high,W.of cor.

South 20.00 chs.mountainous land,sloping north ,soil,
gravelly loam about 1 ft.deep.No timber,undergrowth,sage.

North 60.00 chs.Valley land;red sand and black loam about
3 ft.deep.subsoil,clay.No timber.Undergrowth,sage and rab-
bit brush.

Good grass .

Mountainous land,or land covered with dense undergrowth,
80.00 chs.

East,on a random line bet.secs.29 and 32.

40.00 Set temp.1 seccor.

80.00 Intersect N.and S.line,2 lks.S.of the cor.of secs.28,29,
32,and 35.

Thence I run

S.89°59'W.,on a true line bet.secs.29 and 32, Over

Dog Valley;through dense undergrowth.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
ground,for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 29 in N half
and S 32 in S half;dig pits,18x18x12 ins.,E and W of post,
3.ft.dist.;and raise a mound of earth,3 $\frac{1}{2}$ ft.base,1 $\frac{1}{2}$ ft.high,
N.of cor.✓

75.20 Road,bears N.60°E.and S.60°W.

80.00 The cor.of secs.29,30,31,and 32.✓

Land,valley.

Soil,red sandy loam;3 ft.deep.subsoil,clay.

No timber.

Undergrowth,sage and rabbit brush.

Good grass.

Land covered with dense undergrowth,80.00 chs.

June 23,1911:At this cor.I set off 23°27'N,on the ~~actl~~
arc;and at 0 h 2 m p.m.,l.m.t.,I observe the sun on the
meridian the resulting lat.is 38°05'N.,which is the
proper lat.nearly.

Sub.T.31 S.,R.5 W.-Continued.

Chains

For reasons already explained in survey S. bdy. of Tp., I run West, on a true line bet. secs. 30 and 31.

Over level valley.; through dense undergrowth.

17.10 Road, bears NW and SE.

24.00 Road to Fremont Canon, bears N. 20° W. and S. 20° E.

30.00 Leave Dog Valley, sbears N S and S.

Asc. ridge.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec. cor. mkd. on brass cap 1/2 S 30 in N half and S 31 in S half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

47.40 Top of ridge, 100 ft. above valley, bears N. and S.

Desc.

52.50 Bottom of hollow, 75 ft. below ridge, course NE.

Asc.

73.00 Top of main ridge, 400 ft. above hollow, bears N. and S.

Desc.

130.85 Intersect. W. bdy. of Tp., 6.52 chs. North of the 1/2 sec. cor. on E. bdy. of sec. 25, which is an iron post, 1 in. in dia., and extending 12 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 30 and 31, mkd. on brass cap

T 31 S in N half;

C C R 6 W S 25 in W half.

S 30 in NE.; and

R 5 W S 31 in SE.; quadrants; from which

An oak, 4 ins., dia., bears N. 20° E., 2 lks.

dist. mkd. mkd. T 31 S R 5 W S 30 B T.

An oak, 4 ins. dia., bears S. 78° E., 12 lks.

dist. mkd. T 31 S R 5 W S 31 B T.

Note, I destroy all marks on the cor. of secs. 25, 30, 31, and 36 which pertain to secs. 30 and 31.

Land, mountainous and valley.

Soil, sandy and gravelly loam; 2nd rate. from 1 to 2 ft. deep.

Chains

No timber.

Undergrowth, sage abd rabbit brush in valley and oak and sage brush on mountain.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 130.85 chs.

June 23, 1911.

&

June 24, 1911: At 8 h 2 m a.m., l.m.t., I set off $38^{\circ}05'N.$, on the lat.arc; $23^{\circ}28'N.$, on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 29, 30, 31, and 32.

Thence I run, over Dog Valley,

$N.0^{\circ}03'W.$, bet. secs. 29 and 30.

Over valley land; through dense undergrowth,

Asc. gently.

11.00 Leave valley, bears E. and W.

Asc.

19.00 Top of knoll on ridge, 100 ft. above valley, bears $N.80^{\circ}W.$ and $S.80^{\circ}E.$

Desc.

33.00 Bottom of swale, 100 ft. below knoll, course $S.80^{\circ}W.$

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 30 in W half and S 29 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

43.00 Top of knoll on ridge, 100 ft. above hollow, bears $N.60^{\circ}E.$ and $S.60^{\circ}W.$

Desc.

49.00 Bottom of swale, 75 ft. below ridge, course $S.60^{\circ}W.$

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 19, 20, 29, and 30, mkd. on brass cap

T 31 S S 19 in NW.

R. 5 W. S. 20 in NE.

Chains

S 29 in SE.;and

S 30 in SW.quadrants;and raise a mound of stone,
2 ft.base,1½ ft.high,W.of cor.

Land,mountainous and valley.

Soil,in valley,red sandy about 3 ft.deep,on hills gravelly
and rocky;about 1 ft.deep,subsoil,gravel and clay.

No timber.

Undergrowth,sage and rabbit brush.

Good grass .

Mountainous land,or land covered with dense undergrowth,
80.00 chs.

N.89°59'E.,on a random line bet.secs.20 and 29.

40.00 Set temp.¼ sec.cor.

79.92 Intersect N.and S.line,5 lks.N.of the cor.of secs.20,21,28,
and 29.

Thence | I run

N.89°59'W.,on a true line bet.secs.20 and 29.

Over mountainous land;through dense undergrowth.

Asc:

17.20 Top of ridge,100 ft.above sec.cor.,bears NE and SW.

39.96 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
ground,for ¼ sec.cor..mkd.on brass cap ¼ S 20 in N half
and S 29 in S half;dig pits,18x18x12 ins.,E.and W.of post,
3 ft.dist.;and raise a mound of earth,3½ ft.base,1½ ft.
high,N.of cor.

45.00 Bottom,of hollow,50 ft.below ridge,course SW.Asc.

62.50 Top of ridge,60 ft.above hollow,bears N.and S.

Desc.

79.92 The cor.of secs.19,20,29,and 30.

Land,rolling mountainous.

Soil,red sand and rocky on ridges and red sand and
gravel in hollows.from 1 to 2 ft.deep.

No timber,

Undergrowth,sage brush. Good grass.

Mountainous land,or land covered with dense undergrowth,

Sub.T.31 S.,R.5 W.-Continued.

Chains

79.92 chs.

June 24,1911:At this cor.I set off 23°26'N.,on the decl. arc;and at 0 h 2 m.p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 38°06'N.,which is the proper lat.nearly.

For reasons already explained I run West,on a true line bet.secs.19 and 30.

Over mountainous land;through dense undergrowth,Desc.

.50 Bottom of hollow,5 ft.below cor.,course SE.

Asc.

6.25 Road,bears N.and S.

22.10 Top of ridge,200 ft.above hollow,bears.N.and S.

Desc.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground

for 1/4 sec.cor..mkd.on brass cap 1/4 S 19 in N half and S 30 ins S half;and raise a mound of stone,2 ft.1 1/2 ft.high, N.of cor.

59.00 Bottom of hollow,250 ft.below ridge,course S.

Asc.steep.

86.60 Top of ridge,400 ft.above hollow,bears N.and S.

Desc.

119.00 Bottom of hollow,300ft.below ridge,course S.20°W.

Asc.

126.50 Top of ridge,100 ft.above hollow,bears N.40°E.and S.40°

W.

Desc.

130.40 Bottom of hollow,30 ft.below ridge,course SW.

Asc.

130.75 Intersect W.bdy.of Tp.,6.53 chs.N.of the 1/4 sec.cor.ont E. bdy.sec.24 T.31 S.,R.6 W.,which is an iron post,1 in.

in dia.,and extending 12 ins.above ground,firmly set,and mkd.and witnessed as described by the surveyor general.

Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for closing cor.of secs.19 and 30 ,mkd.on brass cap

T 31 S in N half.

Sub.T.31 S.,R.5 W.-Continued.

Chains

C C R 6 W S 24 in W half;

S 19 in NE.;and

R 5 W S 30 in SE.;quadrants;and raise a mound of stone,2 ft.base,1½ ft.high,E.of cor.

Note:I destroy the marks on the cor.of secs.19,24,25, & 30, which pertain to secs.19 and 30.

Land,mountainous .

Soil,red sand and rocky;from 1 to 2 ft.deep.subsoil, clay and rocky.

No timber.

Undergrowth,dense sage with patches of oak brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth,

130.75 chs.

June 24,1911.

June 26;1911:At 8 n 2 m a.m.,l.m.t.,I set off 38°06'N.,on the lat.arc;23°24'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.19,20,29,and 30.

Thence I run

N.0°03'W.,bet.secs.19 and 20.

Over mountainous land;through dense undergrowth.

Asc.

20.00 Top of ridge,210 ft.above cor.,bears E.and W.

Desc.

40.00 Set an iron pist,3 ft.long,1½ ins.in the dia.,12 ins.in the ground,ón solid rock,and surrounded by mound of stone,for ¼ sec.cor..mkd.on brass cap ¼ S 19 in W half and S 20 in E half;and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

44.00 Bottom of hollow,150 ft.below ridge,course SW.

Asc.

60.00 Begin steeper ascent,bears E.and W.

77.50 Top of ridge,100 ft.above hollow,bears E.and W.

Desc.

Chains
80.00

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, mkd. on brass cap

T 31 S S 18 in NW.

R. 5 W S 17 in NE.

S 20 in SE.; and

S 19 in SW quadrants; from which

A white pine, 6 ins. dia., bears N. 18° E., 63 lks. dist. mkd. T 31 S R 5 W S 17 B T.

A mahogany, 8 ins. dia., bears S. 73° W., 78 lks. dist. mkd. T 31 S R 5 W S 19 B T.

A white pine, 5 ins. dia., bears N 26° W., 83 lks. dist. mkd. T 31 S R 5 W S 18 B T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Land, mountainous

Soil, red sand and rocky, 1 to 3 ft. deep, subsoil, clay.

Undergrowth, sage with patches of oak and mahogany.

No timber.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

S. 89° 59' E., on a random line bet. secs. 17 and 20.

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line, 10 lks. N. of the cor. of secs. 16, 17, 20, and 21.

Thence I run

N. 89° 55' W., on a true line bet. secs. 17 and 20.

Over mountainous land; through dense undergrowth,

Asc.

5.00 Leave aspen sapplings and enter dense sage and oak, bears NW and SE.

6.25 Top of ridge, 50 ft. above cor., bears NW and SE.
Desc.

Sub.T.31.S.,R.5 W.-Continued.

Chains

40.01 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/4 sec. cor. mkd. on brass cap 1/4 S. 17 in N half. and S 20 in S half; dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor. ✓

47.00 Bottom of hollow, 200 ft. below ridge, course SW.
Asc.

57.50 Top of ridge, 150 ft. above hollow, bears N. and S.
Desc.

68.50 Bottom of hollow, 150 ft. below ridge, course S.
Asc:

78.00 Enter scattering timber, bears N. and S.

80.02 The cor. of secs. 17, 18, 19, and 20.
Land, mountainous . . .
Soil, gravelly and red sand from 1 to 2 ft. deep. subsoil, clay.
~~Timber~~ Timber, pine and aspen.
Undergrowth, sage and oak brush and mahogany.
Good grass for grazing.
Mountainous land or land covered with dense undergrowth,

80.02 chs.
June 26, 1911: At this cor. I set off 28°24' N., on the decl. arc; and at 0 h 2 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°07' N., which is the proper lat. nearly.

& _____
For reasons already explained I run West, on a true line bet. secs. 18 and 19. Over mountainous land; through dense undergrowth, and heavy timber.
Asc.

15.00 Leave timber, bears N. and S.

20.00 Top of ridge, 200 ft. above cor., bears N. and S.
Desc.,

Chains

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 18 in N half and S 19 in S half; and raise a mound of stone, 2 ft. base, $\frac{1}{2}$ ft high, N. of cor.

54.50 Bottom of hollow, 200 ft. below ridge, course S.
Asc.

72.50 Top of ridge, 100 ft. above hollow, bears NE and SW.
Desc.

87.00 Bottom of hollow, 125 ft. below ridge, course S.
Asc.

107.25 Top of ridge, 250 ft. above hollow, bears N. and S.
Desc.

123.00 Bottom of hollow, 100 ft. below ridge, course SW.
Asc.

130.65 Intersect W. bdy. of Tp., 6.53 chs. North of the $\frac{1}{2}$ sec. cor. on east side of sec. 13; which is an iron post, 3 in. dia., and extending 12 ins. above ground, mkd. and witnessed as described by the surveyor general.
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 18 and 19, mkd. on brass cap

T 31 S in N half.

C C R 6 W S 13 in W half.

S 18 in NE.; and

R 5 W S 19 in SE. quadrants; and raise a mound of stone, 2 ft. base, $\frac{1}{2}$ ft. high, E. of cor.

Note; I destroy all marks on the cor. of sections 13, 18, 19 and 24, that pertain to secs. 18 and 19, T. 31 S R. 5 W.

and, mountainous.

Soil, sandy and rocky; about 15 ins. deep, subsoil, clay.

Timber, pine and mahogany.

Undergrowth, sage rabbit, and oak brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 130.65 chs.

June 26, 1911.

Chains

June 27, 1911. At 8 h 2 m a.m., l.m.t., I set off $38^{\circ}07'N.$, on the 1st. arc; $25^{\circ}22'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 17, 18, 19, and 20.

Thence I run

$N.0^{\circ}03'W.$, bet. secs. 17 and 18.

Over mountainous land; through scattering timber and dense undergrowth.

Desc.

2.00 Bottom of hollow, 60 ft. below cor., course E.

Asc.

3.00 Volcanic ledge, 20 ft. high, bears E. and W.

11.00 Top of ridge, 125 ft. above hollow, bears E. and W.

Desc.

12.50 Enter heavy timber, bears E. and W.

15.00 Bottom of hollow, 100 ft. below ridge, course E.

Leave timber, bears E. and W.

Asc.

20.00 Leave lodges, bears E. and W.

26.00 Top of ridge, 125 ft. above hollow, bears E. and W.

Desc.

30.00 Bottom of hollow, 75 ft. below ridge, course E.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 18 in W half and S 17 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

46.00 Top of ridge, 200 ft. above hollow, bears NW and SE.

Desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 7, 8, 17, and 18, mkd. on brass cap

T 31 S S 7 in NW.

R. 5 W S 8 in NE.

S 17 in SE.; and

S 18 in SW. quadrants; and raise a mound of stone,

Chains

2 ft.base, $1\frac{1}{2}$ ft.high; W.of cor.
 Land, mountainous
 Soil, red sand and rocky; about 1 to 3 ft. deep. subsoil,
 clay and rock.
 Timber, white and red pine, mahogany and aspen.
 Undergrowth, dense sage brush with patches of oak and
 chokecherry.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered with
 dense undergrowth. 80.00 chs.

S. $89^{\circ}55'E.$, on a random line bet. secs. 8 and 17.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.90 Intersect N. and S. line, 16 lks. S. of the cor. of secs. 8, 9,
 16. and 17.

Thence I run

S. $89^{\circ}58'W.$, on a true line bet. secs. 8, and 17.

Over mountainous land; through dense undergrowth and
 heavy timber.

Asc.

32.50 Top of ridge, 210 ft. above cor., bears N. and S.

Desc.

39.95 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 8 in N half
 and S 17 in S half; dig pits, 18x18x12 ins., E. and W. of post,
 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
 high, N. of cor.

47.10 Bottom of hollow, 75 ft. below ridge, course S.

Asc.

60.00 Top of ridge, 100 ft. above hollow, bears N. and S.

Desc.

79.90 The cor. of secs. 7, 8, 17, and 18. ✓

Land, mountainous

Soil, red sand and clay; from 1 to 3 ft. deep, clay subsoil.

Chains

Timber, pine, cedar and aspen.
 Undergrowth, sage, oak, and service berry.
 Good grass .
 Mountainous or heavily timbered land, or land covered with
 dense undergrowth, 79.90 chs.
 June 27, 1911: At the noon hour the sky is overcast and
 solar observations are impossible.

For reasons already explained I run
 West, on a true line bet. secs. 7 and 18.

Over mountainous land; through dense undergrowth and
 scattering timber.

Desc.

11.00 Bottom of hollow, 30 ft. below cor., course NW.

A small spring bears NW about 20 lks. dist.

Asc.

17.00 Top of ridge, 30 ft. above hollow, bears N. and S.

Desc.

18.50 Bottom of hollow, 40 ft. below ridge, course SW.

Asc.

30.00 Top of ridge, 40 ft. above hollow, bears N. and S.

Desc.

34.00 Bottom of hollow, 40 ft. below ridge, course S.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 7 in N half
 and S 18 in S half; dig pits, 18x18x12 ins. E. and W. of post,
 3 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high,
 N. of cor.

50.00 Enter heavy timber, bears N. and S.

65.00 Top of ridge, 200 ft. above hollow, bears N. and S.

Desc.

70.00 Leave timber, bears N. and S.

80.00 Begin steeper descent, bears N. and S.

Chains

87.40 Bottom of hollow, 200 ft. below ridge, course S.
Asc. abruptly.

95.00 Top of steep ascent, bears N. and S.

131.04 Intersect W. bdy. of Tp., 6.42 chs. N. of the $\frac{1}{2}$ sec. cor. on E. side of sec 12, which is a iron post, 3 ins. in dia., extending 12 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 7 and 18, mkd. on brass cap

T 31 S in N half

C C R 6 W S 12 in W half;

S 7 in NE.; and

R 5 W S 18 in SE.; quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Land, mountainous .

Soil, red sand and rocky; 1 to 3 ft. deep. Subsoil clay and rocky; .

Timber, pine and aspen in patches.

Undergrowth, dense sage and scattering oak and chokecherry.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 131.04 chs.

June 27, 1911.

June 28, 1911: At 8 h 2 m a.m., l.m.t., I set off $38^{\circ}08'N.$, on the lat. arc; $23^{\circ}20'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 7, 8, 17, and 18.

Thence I run

$N. 0^{\circ}03'W.$, bet. secs. 7 and 8.

Over mountainous land; through dense undergrowth.

Desc.

7.25 Bottom of hollow, 50 ft. below cor., course $S. 70^{\circ}W.$

Asc.

Chains

- 30.00 Enter heavy timber, bears E. and W.
- 39.00 Top of main ridge, 150 ft. above hollow, bears N. 75° W. and S. 75° E.
Desc.
- 40.00 Set an iron post, 5 ft. long, 1 in. in dia., 18 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 7 in W half and S 3 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
- 47.10 Leave heavy and enter scattering timber, bears E. and W.
- 60.00 Leave timber, bears E. and W.
- 61.00 Bottom of hollow, 75 ft. below ridge, course S. 60° E.
Asc.
- 65.90 Volcanic ledge, 25 ft. high, bears E. and W.
- 80.00 set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground, on rock, and surrounded by mound of stone, for cor. of secs. 5, 6, 7, and 8, mkd. on brass cap
T 51 S S 6 in NW.
R 5 W S 5 in NE.
S 8 in SE.; and
S 7 in S^W quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
- Land, mountainous .
Soil, gravelly and sandy from 1 to 2 ft. deep, subsoil clay.
Timber, cedar, pine, and aspen
Undergrowth, sage brush and oak.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
June 28, 1911: At this cor. I set off 23° 19' N., on the decl. arc; and at 0 h 2 m p.m. l.m.t., I observe the sun on the meridian the resulting lat. is 38° 09' N., which is the proper lat. nearly.

N. 89° 58' E., on a random line bet. secs. 5 and 8:

Chains

- 40 00 Set temp. $\frac{1}{4}$ sec.cor.
- 79.80 Intersect N.and S.line,21 lks.N.of the cor.of secs.4,5,8,and 9.
 Thence I run
 N.89°53'W.,on a true line bet.secs.5 and 8.
 Over mountainous land;through dense undergrowth and heavy timber.
 Asc.
- 6.00 Top of ridge,50 ft.above cor.,bears NW and SE.
 Desc.
- 17.10 Creek,3 lks.wide,2 ins.deep,in bottom of canon,350 ft. below ridge,course S.20°W.
 Asc.
- 39.90 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 5 in N half and S 8 in S half;from which
 A pine,14 ins.dia.,bears N.10°30'E.,50 lks. dist..mkd. $\frac{1}{4}$ S 5 B T.
 An aspen,6 ins.dia.,bears S.15°W.,25 lks. dist..mkd. $\frac{1}{4}$ S 8 B T.
- 44.00 Leave heavy timber,bears N.and S.
- 46.00 Top of ridge,400 ft.above canon,bears N.60°W.and S.60°E.
 Desc.
- 68.00 Enter heavy timber,bears N.and S.
- 69.00 Bottom of hollow,350 ft.below ridge,course S.10°E.
 Asc.
- 72.50 Leave timber,bears N.and S.
- 79.80 The cor of sec.5,6,7,and 8.
 Land,mountainous
 Soil,gravelly loam;2nd rate from 1 to 2 ft.deep,subsoil clay.
 Timber,pine and aspen.
 Undergrowth,oak and sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land,or land covered

Chains

with dense undergrowth, 79.80 chs.

June 28, 1911.

June 29, 1911: At 8 h 2 m a.m., l.m.t., I set of $38^{\circ}09'N.$, on the lat.arc; $23^{\circ}17'N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.5,6,7 and 8.

Thence I run

West, on a true line, bet.secs.6 and 7.

For reason already explained.

Over mountainous land; through dense undergrowth.

Asc.

1.00 Top of ridge, 10 ft. below cor., bears N. and S.

Desc.

12.00 bottom of hollow, 200 ft. below ridge, course S.

Asc.

24.00 Top of ridge, 125 ft. above hollow, bears N. and S.

Enter heavy timber, bears N. and S.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 6 in N half and S 7 in S half; from which

An aspen, 4 ins. dia., bears $N.22^{\circ}W.$, 10 lks.

dist. mkd. $\frac{1}{2}$ S 6 B T.

An aspen, 5 ins. dia., bears $S.65^{\circ}E.$, 6 lks.

dist. mkd. $\frac{1}{2}$ S 7 B T.

45.00 Creek, 3 lks. wide, 2 ins. deep, in bottom of hollow, 200 ft. below ridge, course S.

Asc.

55.00 Leave heavy timber, bears N. and S.

60.00 Top of ridge, 100 ft. above hollow, bears N. and S.

desce.

66.00 Bottom of hollow, 140 ft. below ridge, course S.

Asc.

Sub.T.31 S., R.5 W.- Continued.

Chains.

- 87.00 Top of ridge, 250 ft. above hollow, bears N. and S.
 Desc.
- 115.00 Begin steeper descent, over ledges, bears N. and S.
- 125.00 Leave ledges, bears N. and S.
- 128.00 Bottom of hollow, 600 ft. below ridge, course S.
 Asc.
- 130.95 Intersect W. bdy. of Tp. 6.45 chs. North of the $\frac{1}{4}$ sec. cor. on east side of sec. 1, which is an iron post, 1 in. in dia. extending 12 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. Set an iron post 3 ft. long, 2 ins. in dia., 18 ins. in the ground, on rock, and surrounded by mound of stone, for closing cor. of secs. 6 and 7, mkd. on brass cap
 T 31 S in N. half,
 C C R 6 W S 1 in W. half,
 S 6 in NE., and
 R 5 W S 7 in SE. quadrants; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high E. of cor.

Note: I destroy all marks on the cor. of secs. 1, 6, 7, and 12 that pertain to secs. 6 & 7.

Land; mountainous.

Soil, red sand and rocky, 1 to 3 ft. deep; subsoil, clay.

Timber, pine and aspen.

Undergrowth, chokecherry oak and sagebrush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth 130.95 chs.

June 29, 1911: At this cor. I set off $23^{\circ} 16' N.$ on the decl. arc; and at 0 h 2 m p.m. l.m.t., I observe the sun on the meridian; the resulting lat. is $38^{\circ} 09' N.$, which is the proper lat. nearly.

$N^{\circ} 03' W.$ on a true line bet. secs. 5 and 6
 Over mountainous land; through heavy timber and dense

Sub.T.31.S., R.5 W.- Continued.

Chains.

undergrowth Asc.

20.00

Top of ridge, 200 ft. above cor., bears E and W.

Desc.

40.00

Bottom of hollow, 200 ft. below ridge, course W.

Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 6 in W. half, and S 5 in E. half; from which

An aspen 12 ins. dia., bears N. 50° E. 5 lks. dist., mkd. $\frac{1}{4}$ S 5 B T

An aspen, 14 ins. dia., bears S. 75° W. 20 lks. dist., mkd. $\frac{1}{4}$ S 6 B T

63.75

Intersect Sixth Standard Parallel South 19.47 chs. East of the standard cor. of secs. 31 and 32, heretofore described.

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 5 and 6, mkd. on brass cap

T 31 S R 5 W C C S 31 S 32 in N. half, R 5 W S 5 in SE.; and

T 31 S S 6 in SW. quadrants; from which

An aspen 9 ins. dia. bears S. 57° E. 12 lks. dist., mkd. T 31 S R 5 W S 5 B T

An aspen, 7 ins. dia., bears S. 72° W. 25 lks. dist., mkd. T 31 S R 5 W S 6 B T

Land, mountainous.

Soil, gravelly, 3d rate.

Timber, aspen and pine.

Undergrowth, oak and sagebrush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth 63.75 chs.

June 29, 1911.

John R. Stewart

U.S. Transitman.

Chains

General Description.

This township is in a high rolling mountainous country with the general trend of ridges and hollows southerly and northerly. The drainage with the exception of part of the west tier of sections is into the Sevier river which runs northward .

The soil is generally sandy and gravelly loam from 1 to 2 ft. deep , on a subsoil of clay or rock.

There is a dense growth of sage brush over the whole township, and there are patches of dense oak and service berry and mahogany brush in the northwestern part of the township. and some rabbit brush in the swales and valley.

Dog Valley occupies part of secs. 28, 29, 30, 31, 32, and 33.

It is almost level and would more than likely produce good dry farm crops. Upper Dog Valley occupies part of secs. 9, 10, 15, and 16, this valley is about 50 ft. above Dog Valley , the soil is sandy loam about 3 ft. deep.

There is considerable aspen and pine timber in the north and northwest parts of the township and some cedar and pinon pine in the east and southeast parts.

There is no mineral in the township.

There are a number of small springs and streams in the township, furnishing plenty of water for stock raising purposes. And grazing is the chief use for which the township is adapted. Pine Creek flows through secs. 1 and 2. An old lake bed lies in secs. 15 and 16. There is a reservoir and dam in SE $\frac{1}{4}$ of sec. 32.

John P. Stewart
Quincy Stewart
U. S. Transitman.

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FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of transitman see book "P" T. 32 S., R. 9 E.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18, 1914.

The foregoing field notes of the survey of _____ the subdivisonal lines of Township No. 31 South, Range No. 5 West, of the Salt Lake Base and Meridian, Utah

executed by _____ John R. Stewart and Quinby Stewart under ~~his~~ their special instructions dated _____ March 27, _____, 191____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

C. Thoreau
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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E.H.

BOOK A-396

E.

FIELD NOTES

OF THE SURVEY OF THE

PANGUITCH GUIDE MERIDIAN

THROUGH

TOWNSHIP NO. 31 SOUTH

BETWEEN

RANGES Nos. 4 and 5 WEST

Of the SALT LAKE BASE AND Meridian,

the State of U T A H

EXECUTED BY

JOHN E. STEWART

the capacity of U. S. ^{Transitmen} Surveyor ~~A~~, under instructions dated, March 27, 1911,
rued by the United States Surveyor General to govern surveys included in
roup No. 8, which were approved by the Commissioner of the General Land
nce, April 22, 1911, pursuant to authority contained in the Act of
ngress dated, 1911.

Survey commenced June 12, 1911

Survey completed June 14, 1911

*Pangutch Guide Mer. 5-64-63
Closing 000-21-84*

FIELD NOTES

BOOK # A-396

INDEX DIAGRAM.

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Panguitch Guide Meridian, T. 31 S., bet. Rs. 4 and 5 W.

Chains

Survey Commenced June 12, 1911: and executed with a W. and L. E. Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the lat. and declination arcs;

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on Mar. 29, 1911.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation, I proceed as follows:

At the cor. of Tp. 31 and 32 S., Rs. 4 and 5 W., heretofore described, latitude $38^{\circ}04'17''$ N.; longitude $112^{\circ}20'04''$ W., I set off $38^{\circ}04'$ N., on the lat. arc; $23^{\circ}10'$ N., on the decl. arc; and at 5 h 0 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

June 12, 1911.

June 13, 1911: At 2 h 09 m a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

At 6 h 30 m a.m. l.m.t., I lay off the azimuth of Polaris $1^{\circ}29'$ to the west, and mark a point in the meridian thus determined, by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.31 ins. east of the meridian determined with the solar.

At 8 h 0 m a.m., l.m.t., I set off $38^{\circ}04'$ N., on the lat.

Panguitch Guide Meridian, Tps. 31 S., bet. Rs. 4 and 5 W. Contd.

Chains arc; $23^{\circ}11'$ n., on the decl. arc; and mark the meridian determined by the solar by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.33 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0'16''$ west and $0'17''$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 50 m a.m. is $N.16^{\circ}05'W.$, the angle thus determined gives the mag. decl. $16^{\circ}05'E.$

From the cor. of Tps. 31 and 32 S., Rs. 4 and 5 W., heretofore described I run

North, bet. secs. 31 and 36, along Panguitch Guide Meridian. Over mountainous land; through scattering timber and scattering undergrowth.

Asc. over ledges.

7.00 Top of ridge, 100 ft. above sec. cor., bears $N.50^{\circ}E.$ and $S.50^{\circ}W.$
Leave ledges.

Desc.

13.70 Bottom of hollow, 18 ft. below ridge, course $S.30^{\circ}W.$

Asc.

15.00 Wood road, bears $N.30^{\circ}E.$ and $S.30^{\circ}W.$

Difference between measurement of 40.00 chs. by two sets of chainmen, is 4 lks. position of middle point

By 1st set 39.98 chs.

By 2nd set 40.02 chs.; the mean of which is

40.00 Set an iron post, 5 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 36 in W half and S 31 in E half; from which

A cedar, 10 ins. dia., bears $N.80^{\circ}E.$, 30 lks. dist. mkd. $\frac{1}{4}$ S 31 B T.

A cedar, 10 ins. dia., bears $N.38^{\circ}W.$, 78 lks. dist. mkd. $\frac{1}{4}$ S 36 B T.

Panguitch Guide Meridian, T. 31 S., Est. Rs. 4 and 5 W.-Continued.

Chains

48.00 Top of spur, 100 ft. above hollow, bears E. and W.

Desc.

62.70 Bottom of hollow, 150 ft. below ridge, course N. 10° W. and S. 10° E.

Asc.

Difference between measurements of 80.00 chs. by two sets of chainmen, is 6 lks. position of middle point,

By 1st set 79.97 chs.

By 2nd set 80.05 chs. the mean of which is

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, mkd. on brass cap

T 31 S in N half.

R 5 W S 25 in NW.

R 4 W S 30 in NE.

S 31 in SE.; and

S 36 in SW. quadrants; from which

A pinon pine, 8 ins. dia., bears N. 39° E., 102 lks.

dist. mkd. T 31 S R 4 W S 30 B T.

A cedar, 8 ins. dia., bears S. 45° E., 12 lks.

dist. mkd. T 31 S R 4 W S 31 B T.

CA pinon pine, 9 ins. dia., bears S. 64° W., 50 lks.

dist. mkd. T 31 S R 5 W S 36 B T.

A pinon pine, 10 ins. dia., bears N. 4° W., 109 lks.

dist. mkd. T 31 S R 5 W S 25 B T.

Land, mountainous, steep and rough.

Soil, gravelly loam; 2nd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, 80.00 chs.

June 13, 1911: At this cor. I set off 23° 12' N., on the decl. arc; and at 0 h 1 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is 38° 05' N., which is the proper lat. nearly.

North, bet. secs. 25 and 30.

- Chains
Over mountainous land, through scattering timber and dense sage brush.
- Asc.
- 19.00 Top of ridge, 70 ft. above cor., bears E. and W.
- Desc.
- 25.00 Bottom of hollow, 30 ft. below ridge, course N. 60° E.
- Asc.
- 36.00 Top of ridge, 60 ft. above hollow, bears N. 30° E. and S. 30° W.
- Desc.
- Difference between measurements of 40.00 chs., by two sets of chainmen, is 6 lks. position of middle point
- By 1st set 39.97 chs.
- By 2nd set 40.03 chs. the mean of which is
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 25 in W half; and S 30 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
- 45.40 Bottom of hollow, 30 ft. below ridge, course N. 20° E.
- Asc.
- 63.00 Top of spur, 40 ft. above hollow, bears E. and W.
- Desc.
- Difference between measurements of 80.00 chs. by two sets of chainmen, is 10 lks. position of middle point,
- By 1st set 79.95 chs.
- By 2nd set 80.05 chs.; the mean of which is
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, mkd. on brass cap
- T 31 S in N half.
- R 5 W S 24 in NW.
- R 4 W S 19 in NE.
- S 30 in SE.; and
- S 25 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
- Land, mountainous.
- Soil, gravelly loam; 2nd rate about 15 ins. deep. subsoil gravel and clay.

Chains

Timber, cedar and pinon pine.
 Undergrowth, sage brush .
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth,
 80.00 chs.

June 13, 1911.

June 14, 1911: At 8 h. 0 m. a. m., l. m. t., I set off $38^{\circ}06'N.$,
 on the lat. arc; $23^{\circ}18'N.$, on the decl. arc; and determine a
 meridian with the solar, at the cor. of secs. 19, 24, 25, a
 and 30.

Thence I run

North, bet. secs. 19 and 24.

Over mountainous land; through dense undergrowth, and
 scattering timber.

Desc.

25.00 Bottom of hollow, 100 ft. below cor., course NW.

35.00 Top of spur, 120 ft. above hollow, bears E. and W.

Desc.

Difference between measurements of 40.00 chs. by two sets
 of chainmen, is 2 lks.; position of middle point

By 1st set 39.99 chs.

By 2nd set 40.01 chs. the mean of which is

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 24 in W half
 and S 19 in E half; from which

A pinon pine, $\frac{3}{4}$ ins. dia., bears S. $10^{\circ}E.$, 7 lks.
 dist. mkd. $\frac{1}{4}$ S 19 B T.

A pinon pine, $\frac{1}{2}$ ins. dia., bears N. 8 W., 74 lks.
 dist. mkd. $\frac{1}{4}$ S 24 B T.

40.75 Bottom of hollow, 150 ft. below ridge, course N. $70^{\circ}E.$

Asc.

58.00 Top of ridge, 1400 ft. above hollow, bears E. and W.

Desc.

Measurements of 80.00 chs. by
 Difference bet. two sets of chainmen is 6 lks. position

Panguitch Guide Meridian, T:31 S., bet. Rs. 4 and 5 West. Contd.

Chains of middle point,

By 1st set 79.97 chs.

By 2nd set 80.03 chs.; the mean of which is

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, mkd. on brass cap

T 31 S in N half.

R 5 W S 13 in NW.

R 4 W S 18 in NE.

S 19 in SE.; and

S 24 in SW. quadrants; from which

A pinon pine, 10 ins. dia., bears N. 51° E., 150 lks. dist. mkd. T 31 S R 4 W S 18 B T.

A pinon pine, 8 ins. dia., bears S. 5° E., 80 lks. dist. mkd. T 31 S R 4 W S 19 B T.

A pinon pine, 11 ins. dia., bears S. 84° W., 25 lks. dist. mkd. T 31 S R 5 W S 24 B T.

A pinon pine, 4 ins. dia., bears N. 31° W., 113 lks. dist. mkd. T 31 S R 5 W S 13 B T.

Land, mountainous.

Soil, sandy and gravelly loam; 2nd rate about 18 ins. deep, subsoil, gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth 80.00 chs.

North, bet. secs. 13 and 18.

Over mountainous land; through heavy timber and dense sage brush.

.50 Bottom of hollow, course N. 80° E.

Asc.

6.00 Top of ridge, 40 ft. above hollow, bears N. 80° E. and S. 80° W.

Desc.

12.60 Bottom of hollow, 190 ft. below ridge, course N. 70° E.

Asc.

Panguitch Guide Meridian, T.31 S., Rs.4 and 5 W., -Continued.

Chains	
27.00	Top of ridge, 150 ft. above hollow, bears E. and W. Desc.
32.50	Bottom of hollow, 240 ft. below ridge, course S. 65° E. Asc.
	Difference between measurements of 40.00 chs. by two sets of chainmen, is 8 lks. position of middle point
	By 1st set 39.96 chs.
	By 2nd set 40.04 chs. the mean of which is
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 13 in W half and S 18 in E half; from which
	A pinon pine, 6 ins. dia., bears N. 52° E., 25 lks.
	dist. mkd. $\frac{1}{4}$ S 18 B T.
	A pinon pine, 14 ins. dia., bears N. 16° W., 40 lks.
	dist. mkd. $\frac{1}{4}$ S 13 B T.
57.00	Top of ridge 100 ft. above hollow, bears N. 50° W. and S. 30° E. Desc.
75.00	Bottom of hollow, 20 ft. below ridge, course S. 80° E. Asc.
78.00	Top of ridge, 25 ft. above hollow, bears NE and SW. Desc.
	Difference bet. measurements of 80.00 chs. by two set of chainmen is 12 lks.; position of middle point,
	By 1st set 79.94 chs.
	By 2nd set 80.06 chs.; the mean of which is
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, mkd. on brass cap
	T 31 S in N half
	R 5 W S 12 in NW.
	R 4 WS 7 in NE.
	S 18 in SE.; and
	S 13 in SW. quadrants; and raise a mound of stone,
	2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Land, mountainous
	Soil, sandy and gravelly loam; 2nd rate. about 2 ft. deep.
	Subsoil, gravel.

Panguitch Guide Meridian T. 31 S., bet. Rs. 4 and 5 W. - Cont'd

Chains

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

June, 14, 1911: At this cor. I set off $23^{\circ}15'N.$, on the decl. arc; and at 0 h 1 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}07'N.$, which is the proper lat. nearly.

North, bet. secs. 7 and 12.

Over mountainous land; through scattering timber and dense undergrowth.

Desc.

18.50 Bottom of hollow, 50 ft. below cor., course $S. 70^{\circ}W.$

Asc.

26.50 Top of ridge, 200 ft. above hollow, bears NE and SW.

Desc.

Difference bet. measurements of 40.00 chs. by two set of chainmen is 4 lks.; position of middle point,

By 1st set 39.98 chs.

By 2nd set 40.02 chs.; the mean of which is

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, on solid rock, and surrounded by mound of earth and stone for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{2}$ S 12 in W half and $\frac{1}{2}$ S 7 in E half; from which

A pinon pine, 6 ins. dia., bears $N. 70^{\circ}E.$, 64 lks.

dist. mkd. $\frac{1}{4}$ S 7 E T.

A pinon pine, 6 ins. dia., bears $S. 80^{\circ}W.$, 9 lks.

dist. mkd. $\frac{1}{2}$ S 12 E T.

50.00 Bottom of hollow, 340 ft. below ridge, course NE.

Wash, 200 lks. wide, 5 ft. deep, in bottom.

Asc.

73.50 Top of ridge, 500 ft. above hollow, bears $N. 30^{\circ}E.$ and $S. 30^{\circ}$

W.

Panguitch Guide Meridian, T. 31 S., Bet. Rs. 4 and 5 W. - Continued.

Chains
 Difference bet. measurements of 80.00 chs. by two sets of chainmen, is 10 lks. position of middle point,
 By 1st set 79.95 chs.
 By 2nd set 80.05 chs.; the mean of which is
 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, mkd. on brass cap
 T 31 S in N half.
 R 5 W S 1 in NW.
 R 4 W S 6 in NE.
 S 7 in SE.; and
 S 12 in SW. quadrants; from which
 A pinon pine, 5 ins. dia., bears S. 21° W., 40 lks. dist. mkd. T 31 S R 5 W S 12 B T.
 A pinon pine, 4 ins. dia., bears N. 19° W., 38 lks. dist. mkd. T 31 S R 5 W S 1 B T.
 No other trees within limits; raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.
 Land, mountainous, steep and rough.
 Soil, gravelly and clay; 3rd rate. Subsoil, clay.
 Timber, cedar and pinon pine.
 Undergrowth, sage and buck brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth,
 80.00 chs.
 North, bet. secs. 1 and 6.
 Over mountainous land; through heavy timber and scattering undergrowth.
 Desc.
 2.50 Bottom of hollow, 50 ft. below sec. cor., course E.
 Asc.
 11.75 Top of ridge, 300 ft. above hollow, bears N. 60° W. and S. 60° E
 Desc.
 22.50 Bottom of hollow, 250 ft. below ridge, course SE.
 Asc.

Panguitch Guide Meridian, T. 31 S., R. 4 and 5 W. - Contd.

Chains

- Asc.
- 58.00 Top of ridge, 300 ft. above hollow, bears N. 60° W. and S. 60° E.
 Leave heavy and enter scattering timber, bears N. 60° W. and S. 60° E.
 Desc.
- Difference bet. measurements of 40.00 chs. by two sets of chains is 4 lks.; position of middle point,
 By 1st set 39.98 chs.
 By 2nd set 40.02 chs.; the mean of which is
- 40.00 Set an iron post, 5 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for a sec. cor. mtd. on brass cap $\frac{1}{2}$ S 1 in W half; and S 6 in E half; and raise a mound of stone, 3 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
- 47.35 Desc. abruptly, bears E. and W.
- 56.00 Creek, 8 lks. wide, 5 ins. deep, in bottom of Big Pine Creek canon, 600 ft. below ridge, course E.
 Enter heavy timber, bears E. and W.
 Asc. abruptly.
 Difference bet. measurements of 64.65 chs. by two sets of chains, is 6 lks.; position of middle point,
 By 1st set 64.60 chs.
 By 2nd set 64.66 chs.; the mean of which is
- 64.63 Intersect 6th Standard Parallel South, 21.84 chs. East of the Standard cor. of Tps. 30 S., R. 4 and 5 W., hereafter described. This course was determined by retracement made June 30, 1911, Book B page 2.
 Set an iron post, 5 ft. long, 3 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for closing cor. of Tps. 31 S., R. 4 and 5 W., mtd. on brass cap
 T 30 S R 4 W R 5 W S 31 S 36 in N. half.
 C C T 31 S in S half;
 R 4 W S 6 in SE.; and
 R 5 W S 1 in SW. quadrants; from which
 A cedar, 14 ins. dia., bears S. 54° E., 61 lks.

Panguitch Guide Meridian, T. 31 S., Bet. Rs. 4 and 5 W. - Contd.

Chains

dist. mkd. T 31 S R 4 W S 6 B T.

A pinon pine, 12 ins. dia., bears S. 47° W., 20 lks.

dist. mkd. T 31 S R 5 W S 1 B T.

Land, mountainous very steep and rough.

Soil, sandy loam and gravelly; about 12 ins. deep. Subsoil, clay.

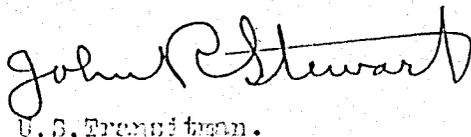
Timber, cedar and pinon pine.

Undergrowth, sage and buck brush.

Good grass for grazing.

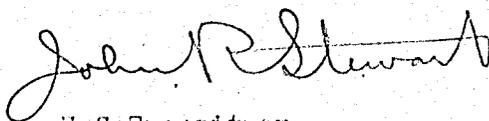
Mountainous or heavily timbered land, 64.63 chs.

June 14, 1911.



U. S. Transitter.

For general description see notes of Sub. T. 31 S., R. 5 W.



U. S. Transitter.

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CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, _____, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of _____ or certificate of assistants see book "P" T.32 S.; R.9 E.

the _____ Meridian, in the State of _____ which are represented in the foregoing field notes as having been executed by him, and under his direction; and that said survey has been, in all respects, to the best of our knowledge and belief, well and truthfully executed.

Table with columns: NAME, PERIOD OF SERVICE (BEGUN, ENDED), CAPACITY. The table contains multiple rows for recording assistant names and their service periods.

Subscribed and certified to before me on the dates of the final service as shown above.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of transitman see book "P" T.32 S., R.9 E.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18, 1914.

The foregoing field notes of the survey of the Panguitch Guide Meridian through Township No. 31 South, between Ranges 4 and 5 West of the Salt Lake Base and Meridian, Utah, _____

executed by _____ John R. Stewart under his special instructions dated _____ March 27, _____, 191____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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BOOK A-396

Handwritten notes:
under 4/23/12
[Signature]

W.C.S. FIELD NOTES

OF THE SURVEY OF THE

SOUTH AND EAST BOUNDARIES

of

Township No. 31 South, Range No. 4 West,

Of the Salt Lake Base and Meridian,

the State of Utah

EXECUTED BY

John R. Stewart and Quinby Stewart

Transitmen

the capacity of U.S. ~~Surveyor~~ under instructions dated March 27, 1911,

issued by the United States Surveyor General to govern surveys included in group No. 8, which were approved by the Commissioner of the General Land

Office, April 22, 1911, pursuant to authority contained in the Act of Congress dated _____, 1911.

Survey commenced June 28, 1911,

Survey completed July 3, 1911,

Handwritten notes:
S. Day - 5-77-74 ✓
E. - 5-62-23 ✓
Clay - 5-17-90 ✓

BOOK A-396

INDEX DIAGRAM.

Township 31 South, Range 4 West

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Survey commenced June 28, 1911, and executed with a K. and E. transit, No. 20578²⁰⁵⁷⁸ with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the latitude and declination arcs. The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on March 20, 1911.

At the cor. of Tps. 31 and 32 S., Rs. 4 and 5 W and 4 $\frac{1}{2}$ and 5 W., latitude 38°04'17"N., longitude 112°20'04"W., At 10 h 10.7 m a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual and mark a point in the line thus determined, by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris 1°29' to the west and mark the meridian thus determined by cutting a small groove in a stone firmly set in the ground, 5.00 chs. N. of the cor.; this

At 8 h 3 m a.m., l.m.t., I set off 38°04' N., on the lat. arc; 25°20' N., on the decl. arc; and determine a meridian with the solar, and mark a point thereof on a stone already set 5.00 chs. N. of the cor.; this mark falls 0.30 ins. east of the meridian established by Polaris observation; Therefore I conclude that the adjustments of the instrument are satisfactory.

Note: For complete forenoon and afternoon tests see notes of Panguitch Guide Meridian T.32 S., Rs. 4 $\frac{1}{2}$ and 5 W.

X Thence I run, from cor. Tps. 31 & 32 S., Rs. 4 & 5 W., heretofore described, East on true line along S. bdy. T.31 S., R.4 W., bet. secs. 6 and 31.

Over mountainous land; through scattering timber.
Desc.

1.60 Bottom of hollow, 75 ft. below cor., course S. 10° E.
Asc.

21.00 Top of ridge, 800 ft. above hollow, bears W. and S. ✓
Descend over rough ledges.

31.00 Foot of descent, 200 ft. below ridge, bears N. 10° E. and S.

Chains.

10° W.

31.40 County road, bears N.10° E. and S.10° W.

31.50 Telephone line, Circleville to Pangnitch, bears N.10° E. and S.10° W.

31.90 Fence, bears N.10° E. and S.10° W.

32.15 Ditch, 5 lks.wide, 14 ins.deep, course N.10° E.

Enter plowed land belonging to Mr. Robinson.

37.74 Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{4}$ sec.cor., mkd.on brass cap $\frac{1}{4}$ S 31 in N. half, and S 6 in S.half; dig pits 18' x 18' x 12 ins. E. and W.of post, 3 ft.dist.; and raise a mound of earth $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft.high N.of cor.

38.73 Leave plowed land, bears NE. and SW.

38.80 Left bank of Sevier river, 8 ft.high, water, 3 ft.deep, course NE.

42.00 Right bank of river, bears NE. and SW. Ascend.

70.78 Fall 72 lks.S.of the old cor.of secs.5,6,31 and 32, which is a granite stone 12' x 8' x 8 ins.above ground, set 4 ins.in the ground, mkd. and witnessed as described by the Surveyor General. I destroy the old cor.

77.74 Set an iron post 3 ft.long, 3 ins.in dia., 24 ins.in the ground, for cor.of secs.5,6,31 and 32, mkd.on brass cap

T 31 S S 31 in NW.

R 4 W S 32 in NE.

R $4\frac{1}{2}$ W S 5 in SE.; and

T 32 S S 6 in SW.quadrants; and raise a mound of

stone 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.

Land, mountainous.

Soil, clay from decomposed volcanic rock; clay subsoil.

Timber, cedar and pinon pine.

Undergrowth, sagebrush. Good grass for grazing.

Mountainous land 77.74 chs.

June 28, 1911: At this cor. I set off 23°19' N. on the decl. arc; and at 0 h 3m p.m.l.m.t., observe the sun on the meridian; the resulting lat. is 38°04' N. which is the proper lat. nearly.

Chains June 29, 1911: At 7 h. 3 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat.arc; $23^{\circ}27'N.$, on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 5, 6, 31, and 32. on S.bdy. of Tp.;

Thence I run

East, on a true line bet. secs. 5 and 32.

Over mountainous land; through heavy timber and dense sage brush.

Asc.

22.00 Top of ridge, 75 ft. above cor., bears NW and SE.

Desc.

26.00 Bottom of hollow, 60 ft below ridge course $N.70^{\circ}W.$

Asc.

40.00 Set an iron post, 5 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 32 in N half and S 5 in S half; from which

A pinon pine, 5 ins. dia., bears $N.20$ lks.

dist. mkd. $\frac{1}{2}$ S 32 B T.

A pinon pine, 14 ins. dia., bears $S.3^{\circ}W.$, 34 lks.

dist. mkd. $\frac{1}{2}$ S 5 B T.

70.00 Top of ridge, 300 ft. above hollow, bears $N.85^{\circ}W.$ and $S.85^{\circ}E.$

Desc.

78.50 Bottom of hollow, 75 ft. below ridge, course $N.70^{\circ}W.$

Asc.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, mkd. on brass cap

T 31 S S 32 in NW.

R 4 W S 33 in NE.

R $4\frac{1}{2}$ W S 4 in SE; and

T 32 S S 5 in SW quadrants; from which

A pinon pine, 10 ins. dia., bears $N.45^{\circ}E.$, 36 lks.

dist. mkd. T 31 S R 4 W S 33 B T.

A pinon pine, 15 ins. dia., bears $S.85^{\circ}E.$, 15 lks.

dist. mkd. T 32 S R $4\frac{1}{2}$ W S 4 B T.

A pinon pine, 12 ins. dia., bears $S.65^{\circ}W.$, 15 lks.

dist. mkd. T 32 S R $4\frac{1}{2}$ W S 5 B T.

Chains

A pinon pine, 14 ins. dia., bears N.43°30'W., 15 lks.
 dist...mkd. T 31 S R.4 W S 32 B T.

Land, mountainous slopes and drains NW.

Soil, gravel and clay; subsoil clay.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

June 29, 1911: At the noon hour the sky is overcast and
 solar observations are impossible.

East, on on a true line, bet. secs. 4 and 33 .

Over mountainous land; through dense undergrowth and heavy
 timber.

Asc.

12.00 Top of ridge, 60 ft. above cor. bears N. and S.

Desc.

19.00 Bottom of hollow, 30 ft. below ridge, course N.15°W.

Asc.

34.00 Top of ridge, 30 ft. above hollow, bears N.20°W. and S.20°E.

Desc.

37.50 Bottom of hollow 30 ft. below ridge, course N.15°W.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the
 ground, on rock, and surrounded by mound of stone,
 for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 33 in N half and
 S 4 in S half; from which

A pinon pine, 6 ins. dia., bears N.20°E., 100 lks.

dist...mkd. $\frac{1}{2}$ S 33 B T.

A pinon pine, 14 ins. dia., bears S.49°25'E., 118 lks.

dist...mkd. $\frac{1}{4}$ S 4 B T.

60.00 Top of ridge, 20 ft. above hollow, bears N. and S.

Desc.

79.00 Bottom of hollow, 30 ft. below ridge, course S.60°W.

Asc.

S.bdy.T.31 S.,R.4 W.-Continued.

Chains

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 22 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, mkd. on brass cap

T 31 S S 33 in NW.

R 4 W S 34 in NE.

R 4 1/2 W S 3 in SE.; and

T 32 S S 4 in SW. quadrants; from which

A pinon pine, 10 ins. dia., bears N. 34° E., 22 lks.

dist. mkd. T 31 S R 4 W S 34 B T.

A pinon pine, 10 ins. dia., bears S. 53° E., 2 lks.

dist. mkd. T 32 S R 4 1/2 W S 3 B T.

A cedar, 8 ins. dia., bears S. 67° W., 23 lks.

dist. mkd. T 32 S R 4 1/2 W S 4 B T.

A pinon pine, 10 ins. dia., bears N. 16° W., 4 lks.

dist. mkd. T 31 S R 4 W S 33 B T.

Land, mountainous.

Soil, gravel and clay red clay subsoil.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80-100 chs.

June 29, 1911.

June 30, 1911: At 7 h 3 m a.m., 1.m.t., I set off 38° 04' N., on the lat. arc; 23° 15' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 3, 4, 33, and 34.

Thence I run

W East, on a true line bet. secs. 3 and 34.

Over mountainous land; through heavy timber and dense undergrowth.

Asc.

1.00 Top of ridge, 10 ft. above cor., bears N. 30° E. and S. 30° W.

Desc.

6.10 Bottom of hollow, 60 ft. below ridge, course S. 35° W.

Chains Asc.

27.40 Top of ridge, 500 ft. above hollow, bears N. 15° W. and S. 15° E.
Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 34 in N half and S 3 in S half; from which

A pinon pine, 4 ins. dia., bears N. 6° W., 25 lks.
dist. mkd. $\frac{1}{4}$ S 34 B T.

A mahogany, 4 ins. dia., bears S. 68° W., 56 lks.
dist. mkd. $\frac{1}{4}$ S 3 B T.

68.00 Bottom of hollow, 40 ft. below ridge, course N. 30° E.
Asc.

70.00 Top of ridge, 40 ft. above hollow, bears N. 35° E. and S. 35° W.
Desc.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, mkd. on brass cap

T 31 S S 34 in NW.

R 4 W S 35 in NE.

R 4 W S 2 in SE.; and

T 32 S S 3 in SW. quadrants; from which

A pinon pine, 4 ins. dia., bears N. 18° E., 55 lks.
dist. mkd. T 31 S R 4 W S 35 B T.

A pinon pine, 6 ins. dia., bears S. 24° E., 40 lks.
dist. mkd. T 32 S R 4 W S 2 B T.

A pinon pine, 5 ins. dia., bears S. 38° W., 45 lks.
dist. mkd. T 32 S R 4 W S 3 B T.

A pinon pine, 6 ins. dia. bears N. 28° W., 38 lks.
dist. mkd. T 31 S R 4 W S 34 B T.

Land, mountainous

Soil, red sand and clay Subsoil clay.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass .

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

June 30, 1911: At this cor. I set off 23° 14' N., on the decl. arc; and at 0 h 3 m p.m., l.m.t., I observe the sun on the

Chains.

meridian the resulting lat. is 38°04'N., which is the proper lat. nearly.

East, on a true line, bet. secs. 2 and 35.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

5.00 Leave timber and enter dense undergrowth, bears N. and S.

10.00 Bottom of hollow, 80 ft. below cor., course N. 20° E.

Asc.

13.20 Top of ridge, 100 ft. above hollow, bears N. and S.

Desc.

20.00 Bottom of hollow, 80 ft. below ridge, course N.

Asc.

25.00 Enter heavy timber, bears N. and S.

28.50 Asc. more abruptly over ledges, bears N. and S.

36.00 Top of ridge, 200 ft. above hollow, bears N. and S.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the

ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 35 in N half and S 25 in S half; from which

A pinon pine, 4 ins. dia., bears N. 15° W., 12 lks. dist. mkd. $\frac{1}{4}$ S 35° B T.

A pinon pine, 6 ins. dia., bears S. 4° W., 40 lks. dist. mkd. $\frac{1}{4}$ S 2° B T.

45.00 Leave heavy and enter scattering timber, bears N. and S.

74.00 Bottom of hollow, 250 ft. below ridge, course N. 20° W.

Asc.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone,

for cor. of secs. 1, 2, 35, and 36, mkd. on brass cap

T 31 S S 35 in NW.

R 4 W S 36 in NE.

R 4 W S 1 in SE; and

Chains

T 32 S S 2 in SW quadrants; from which
 A pinon pine, 10 ins. dia., bears N. 80° E., 25 lks.
 dist..mkd. T 31 S R 4 W S 36 B T.
 A pinon pine, 14 ins. dia., bears S. 18° E. 45 lks.
 dist..mkd. T 32 S R 4 W S 1 B T.
 A cedar, 23 ins. dia., bears S. 39° W., 39 lks.
 dist..mkd. T 32 S R 4 W S 2 B T.
 A pinon pine, 12 ins. dia., bears N. 28° W., 65 lks.
 dist..mkd. T 31 S R 4 W S 35 B T.

Land, mountainous.
 Soil, sandy and clay loam and rocky; about 12 ins. deep.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 Good grass .
 Mountainous or heavily timbered land, or land covered with
 dense undergrowth, 80.00 chs.

East, on a true line bet. secs. 1 and 36.

Over mountainous land; through heavy timber and scattering
undergrowth.

Asc.

5.50 Top of ridge, 100 ft. above cor., bears N. and S.

Desc.

19.50 Bottom of hollow, 75 ft. below ridge, course NW.

Asc.

30.00 Leave heavy and enter scattering timber, bears N. and S.

40.00 Enter heavy timber, bears N. and S.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor..mkd. on brass cap $\frac{1}{2}$ S 36 in N half
 and S 1 in S half; from which

A mahogany, 4 ins. dia., bears N. 67° W., 25 lks.
 dist..mkd. $\frac{1}{2}$ S 36 B T.

A mahogany, 6 ins. dia., bears S. 5° W., 33 lks.
 " dist..mkd. $\frac{1}{4}$ S 1 B T.

44.00 Top of ridge, 150 ft. above hollow, bears N. and S.

Desc.

Chains

55.00 Desc.more abruptly over ledges,bears N.and S.
57.0 Creek,2 lks.wide,3 ins.deep,in bottom of canon,200 ft.below
ridge course N.

Asc.abruptly.

79.00 Top of ridge,350 ft.above canon,bears N.and S.
Desc.

80.00 Set an iron post,3 ft.long,3 ins.in dia.,12 ins.in the
ground,on solid rock,and surrounded by mound of stone,
for cor.of Tps.31 and 32 S.,Rs.3 and 4 W.,
mkd.on brass cap

T 31 S in N half.

T 32 S in S half;

R 4 W S 36 in NW.

R 3 W S 31 in NE.

R 3 W S 6 in SE.; and

R 4 W S 1 in SW.quadrants;from which

A mahogany,4 ins.dia. bears N.60°30'E.,60 lks.
dist..mkd.T 31 S R 3 W S 31 B T:

A mahogany,4 ins.dia. bears S.43°15'E.,56 lks.
dist..mkd.T 32 S R 3 W S 6 B T.

A mahogany 4 ins.dia.,bears S.77°15'W.,38 lks.
dist..mkd.T 32 S R 4 W S 1 B T.

A mahogany 5 ins.dia.,bears N.36°W.,103 lks.
dist..mkd.T 31 S R 4 W S 36 B T.

Land,mountainous .

Soil,red sand and rocky about 12 ins.deep.

Timber,cedar,pinon pine,and mahogany.

Undergrowth,sage .

HGood grass.

Mountainous or heavily timbered land,80.00 chs.

June 30,1911.

July 1,1911:At 7 h.3 m.a.m.,l.m.t.,I set off 38°04'N.,

E.bdy.T.31 S.,R.4 W.-Continued.

Chains on the lat.arc;23°12'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of Tps31 and 32 S., Rs.3 and 4 W.

Thence I run
North bet.secs.31 and 36.
Over mountainous land;through heavy timber and dense undergrowth.

Desc.
2.10 Begin abrupt descent,bears E.and W.
7.20 Bottom of hollow,250 ft.below cor,course W.
Asc.
10.50 Top of ridge,150 ft.above hollow,bears NW and SE.
Leave heavy and enter scattering timber,bears NW and SE.
Desc.
39.00 Bottom of hollow,200 ft.below ridge,course N.30°W.
Desc.
40.00 Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone for $\frac{1}{4}$ sec.cor.mkd.on brass cap $\frac{1}{4}$ S 36 in W half and S 31 in E half;from which
A cedar,5 ins.dia.,bears S.35°E.,65 lks.
dist..mkd. $\frac{1}{4}$ S 31 B T.
A mahogany,6 ins.dia.,bears S.45°W.,45 lks.
dist.. mks. $\frac{1}{4}$ S 36 B T.
45.00 Enter heavy timber,bears E.and W.
80.00 Set an iron post,3 ft.long,3 ins.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone, for cor.of secs.25,30,31,and 36,mkd.on brass cap
T 31 S in E half
R 4 W S 25 in NW.
R 3 W S 30 in NE.
S 31 in SE.;and
S 36 in SW.quadrants;from which
A pinon pine,10 ins.dial bears N.80°E.,25 lks.
dist..mkd.T 31 S R 3 W S 30 B T.
A cedar,4 ins.dia.,bears S.43°E.,35 lks.

Chains

dist..mkd.T.31 S R 3 W S 31 B T.

A pinon pine,4 ins.dia.,bears S.64°W.,43 lks.

dist..mkd.T 31 S R 4 W S 36 B T.

A pinon pine,5 ins.dia.,bears N.44°W.,29 lks.

dist..mkd.T 31 S R 4 W S 25 B T.

Land,mountainous.

Soil,sandy and rocky;2nd and 4th rate.subsoil clay and gravel.

Timber,cedar and pinon pine.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous or heavily timbered land,or land covered with dense undergrowth,80.00 chs..

July 1,1911:At this cor.I set off 23°10'N.,on the decl. arc,and at 3 p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 38°05 'N.,which is the proper lat.nearly.

7/1/11

North bet.secs.25 and 30.

Over mountainous land;through heavy timber.

Desc.abruptly,through undergrowth.

10.00 Foot of abrupt descent,bears NW and SE.

14.50 Wood road,bears NW and SE.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 25 in W half and S 30 in E half;from which

A cedar,12 ins.dia.,bears S.87°E.,45 lks.

dist..mkd. $\frac{1}{4}$ S 30 B T.

A cedar 24 ins.dia.,bears N.49°W.,35 lks.

dist..mkd. $\frac{1}{4}$ S 25 B T.

48.70 Lost Creek,4 lks.wide,4 ins.deep,in bottom of canon, 100 ft.below cor,course W.

Asc.

80.00 Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the ground,for cor.of secs.19,24,25,and 30,mkd.on brass cap

E.bdy.T.31 S.,R.4 W.-Continued.

Chains

T 31 S in N half
 R 4 W S. 24 in NW.
 R 3 W S 19 in NE.
 S 30 in SE.; and
 S 25 in SW. quadrants; from which
 A pinon pine, 7 ins. dia., bears N. 62° E., 128 lks.
 dist..mkd. T 31 S R 3 W S 19 B T.
 A cedar, 8 ins. dia., bears S. 19° E., 35 lks.
 dist..mkd. T 31 S R 3 W S 30 B T.
 A pinon pine, 7 ins. dia., bears S. 38° 15' W., 55 lks.
 dist..mkd. T 31 S R 4 W S 25 B T.
 A pinon pine, 9 ins. dia., bears N. 46° W., 50 lks.
 dist..mkd. T 31 S R 4 W S 24 B T.

Land, mountainous
 Soil, sandy and clay loam; 2 ft. deep. Subsoil, gravel and clay.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 Mountainous or heavily timbered land, 80.00 chs.

North bet. secs. 19 and 24.

Over mountainous land; through heavy timber and scattering undergrowth.
 Desc.

.25 Wash, 25 lks. wide, 5 ft. deep, course W.

25.00 Wood road, bears NW and SE.

Leave heavy and enter scattering timber, bears NW and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for 1/4 sec. cor. mkd. on brass cap 1/4 S 24 in W half and S 19 in E half; from which

A pinon pine, 6 ins. dia., bears S. 55° E., 34 lks.
 dist... mkd. 1/4 S 19 B T.

A pinon pine, 8 ins. dia., bears N. 45° W., 45 lks.
 dist..mkd. 1/4 S 24 B T.

E.bdy.T.31 S.,R.4 W.-Continued.

Chains

40.30 Wood road,bears NE and SW.

63.50 Irrigation ditch,10 lks.wide,4 ft.deep,course N.60°W.

65.00 Wood road,bears NW and SE.

76.50 Begin abrupt ascent,bears E.and W.

80.00 Top of ridge,25 ft.above $\frac{1}{2}$ sec.cor.,bears E.and W.

Set an iron post,3 ft.long,3 ins.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high,for corref secs.13,18,19,and 24,mkd. on brass cap

T 31 S in N half.

R 4 W S 13 in NW.

R 3 W S 18 in NE.

S 19 in SE.;and

S 24 in SW.quadrants;and raise a mound of stone,

2 ft.base, $1\frac{1}{2}$ ft.high,W.of cor.

Land,mountainous .

Soil,rocky and red sand mixed,3rd rate.about 18 ins.deep, subsoil,gravel and clay.

Timber,cedar and pinon pine.

Undergrowth,sage brush.

Good grass .

Mountainous or heavily timbered land,80.00 chs.

July 1,1911.

July 3,1911:At 7 h 4 m a.m.,l.m.t.,I set off 38°07'N., on the lat.arc;23°03'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.13,18,19, and 24.

Thence I run North,between secs.13 and 18.

Over mountainous land;through scattering timber and dense sage and rabbit brush.

Desc.

4.50 Foot of descent,150 ft.below ridge,bears NE and SW.

E. bdy. T. 31 S., R. 4 W. - Continued.

Chains

- Wash, 20 lks. wide, 2 ft. deep, course NE.
Thence over valley.
- 19.60 Wood road, bears NE and SW.
- 37.50 Wood road, bears NE and SW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. c. r. mkd. on brass cap $\frac{1}{4}$ S 13 in W half and S 18 in E half; from which
 - A pinon pine, 8 ins. dia., bears N. 40° E., 104 lks. dist. mkd. $\frac{1}{4}$ S 18 B T.
 - A pinon pine, 11 ins. dia., bears S. 45° W., 96 lks. dist. mkd. $\frac{1}{4}$ S 13 B T.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 7, 12, 13, and 18, mkd. on brass cap
 - T 31 S in N half.
 - R 4 W S 12 in NW.
 - R 3 W S 7 in NE.
 - S 18 in SE.; and
 - S 13 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

S. 4.50 chs. mountainous on N. slope of ridge, rock and sand mixed about 12 ins. deep. subsoil, clay and gravel. Scattering timber and dense sage and rabbit brush.

N. 76.50 chs. in valley gradual slope to the north, soil mixture of sand and gravel and some clay; 2nd rate. about 2 ft. deep. Good for dry farming.

Mountainous land, or land covered with dense undergrowth,

80.00 chs.

North bet. secs. 7 and 12.

Over nearly level valley; through dense sage and rabbit brush.

Desc. gradually.
- 40.00 Set an iron post, 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 12 in W half and S 7 in E half; dig pits, 18x18x12 ins., N. and S. of post,

Chains

3 ft.dist.;and raise a mound of earth,3 1/2 ft.base,1 1/2 ft.high,
W.of cor.

51.50 Wood road,bears N.30°W.and S.30°E.

80.00 Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the
ground,for cor.of secs.1,6,7,and 12,mkd.on brass cap
T 31 S in N.half
R 4 W S 1 in NW.
R 3 W S 6 in NE.
S 7 in SE.;and
S 12 in SW.quadrants;and dig pits,18x18x12 ins.

in each sqn.5 1/2 ft.dist..and raise a mound of earth,4 ft.
base,2 ft.high,W.of cor.

Land,nearly level valley.

Soil,sandy and clay loam mixed with a little gravel.

2nd.rate about 2 ft.deep.

No timber.

Undergrowth,sage and rabbit brush.

Good grass for grazing.

Land, covered with dense undergrowth,80.00 chs.

North,bet.secs.1 and 6.

Over nearly level valley;through dense sage and rabbit
brush,and greasewood.

Desc.gradually.

30.00 Wash,10 lks.wide,2 ft.deep,course N.60°W.

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
ground,for 1/2 sec.cor..mkd.on brass cap 1/4 S 1 in W half
and S 6 in E half;and dig pits,18x18x12 ins.,N.and S.of post
3 ft.dist.;and raise a mound of earth,3 1/2 ft.base,1 1/2
ft.high,W.of cor.

63.23 Intersset 6th Standard Parallel South,17.90 chs.N.89°27'E.
of the Standard cor.of Tps.30 S.,Rs.3 and 4 W. heretofere

described.This course determined by retracement July 20,
see book "J" page 2.

Set an iron post,3 ft.long,3 ins.in dia.,24 ins.in the
ground,for closing cor.of Tps.31 S.,Rs.3 and 4 W.,

Chains

Mkd.on brass cap

C C T 30 S R3W R 4 W S 31 S 36 in N. half.

C C T 31 S in S half.

R 3 W S 6 in SE.;and

R 4 W S 1 in SW.quadrants;and raise a mound
of stone 2 ft.base,1 1/2 ft.high,S.of cor.

Land,level .

Soil,sandy and clay loam mixed with some gravel about
2 ft.deep.

No timber.

Undergrowth,greasewood,sage and.rabbit.brush.

Good grass for grazing..

Land covered with dense undergrowth,63.23 chs.

July 3,1911:At this cor.I set off 23°01'N.,on the
decl.arc;and at 0 h 4 m p.m.,l.m.t.,I observe the sun
on the meridian the resulting lat.is,38°09'N.,which is the
proper lat.nearly.

July 3,1911.

For general description see notes of subdivision of
this township.

Junby Stewart

U.S.Transitman.

BOUNDARIES OF T. 51 S., R. 4 E.

Latitudes, Departures, and Closing Errors.

Line Designated	True Bearing	Dist. chs.	Latitudes, Departures.			
			N. chs.	S. chs.	E. chs.	W. chs.
West Boundary	North	464.63	464.63	.....	.....	.....
North Boundary	East	18.16	.....	.....	18.16	.....
North Boundary	S.89°09'E.	39.40	.....	.58	39.40	.....
North Boundary	S.87°30'E.	39.90	.....	1.75	39.86	.....
North Boundary	N.89°26'E.	39.94	.40	.....	39.94	.....
North Boundary	N.89°54'E.	40.33	.07	.....	40.33	.....
North Boundary	East	39.63	.....	.....	39.63	.....
North Boundary	N.89°46'E.	242.42	.99	.....	242.42	.....
North Boundary	N.89°27'E.	17.90	.17	.....	17.90	.....
East Boundary	South	463.23	.....	463.23	.....	.....
South Boundary	West	477.74	.....	.....	.....	477.74
Convergence					.57	
T o t a l s			466.26	465.58	478.21	477.74
			<u>465.56</u>		<u>477.74</u>	
Error in lat. and dep.			.70		.47	

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FINAL OATH OF UNITED STATES SURVEYOR.

I, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for bearing date of the day of 191, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

For final oath of transition see book "1" 5.30 U., U.S.S.

of the Meridian, in the State of which are represented in the foregoing field notes as having been executed by me, and under my direction, and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said and sworn to before me this day of 191



APPROVAL.

Office of the United States Surveyor General.

Salt Lake City, Utah, June 18, 1914

The foregoing field notes of the survey of the South and East Boundaries of Township No. 31 South, Range No. 4 East of the Salt Lake Base and Meridian Utah,

executed by Quincy Stewart under his special instructions dated March 27, 1914, having been critically examined, and the necessary corrections and explanations made, said field notes, and the surveys they describe, are hereby approved.

[Signature] U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in has been correctly copied from the original notes on file in this office.

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4-679

W. K.

BOOK A-396

G.

FIELD NOTES

OF THE SURVEY OF THE

RETRACEMENT OF

SIXTH STANDARD PARALLEL SOUTH

THROUGH

RANGE NO. 4 WEST

Of the SALT LAKE BASE AND Meridian,

the State of U T A H

EXECUTED BY

JOHN B. STEWART

in the capacity of U. S. ^{Transitman}~~Surveyor~~, under instructions dated March 27, 1911,

issued by the United States Surveyor General to govern surveys included in

Group No. 8, which were approved by the Commissioner of the General Land

Office, April 22, 1911, pursuant to authority contained in the Act of

Congress dated _____, 1911.

Survey commenced June 29, 1911

Survey completed July 3, 1911.

Retr. 6th Stand. 6-21-98

SECRET

INDEX DIAGRAM.

Location

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Chains Survey commenced June 29, 1911, and executed with a W. and L. E. Gurley Explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found, correct, and was approved by the surveyor general for Utah, on March 28, 1911.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation, I proceed as follows:

At the Standard cor. of Tp., 30 S., Rs. 4 and 5, W., heretofore described, latitude $38^{\circ}09'30''$ N., longitude $112^{\circ}20'04''$ W., I set off $38^{\circ}09'$ N., on the lat. arc; $23^{\circ}17'$ N., on the decl. arc; and at 5 h 3 m p.m., l.m.t., I determine a meridian with the solar, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

June 29, 1911.

June 30, 1911: At 1 h 2.9 m a.m., l.m.t., I observe the Polaris at eastern elongation in accordance with the Manual, and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.;

At 7 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}28.8'$ to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.39 ins. east of the meridian established by the solar.

At 8 h 3 m a.m., l.m.t., I set off $38^{\circ}09'$ N., on the lat. arc; $23^{\circ}14'$ N., on the decl. arc; and determine a meridian with

Chains

the solar and mark a point thereof by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.40 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about 0'21" west and 0'22" east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h. 30 m a.m. is N. 16° 11' W., the angle thus determined, gives the mag decl. 16° 11' E.

East, on a retracement line along south side sec. 31 Over mountainous land; through heavy timber and scattering undergrowth.

Asc. gradually along north side of Big Pine Creek canon.

21.84 The Closing cor. of Tps. 31 S., Rs. 4 and 5 W., heretofore described.

24.40 Top of ridge, 75 ft. above cor., bears N. and S.
Desc. abruptly over conglomerate ledges.

33.00 Bottom of gulch, 250 ft. below ridge, course S.
Asc. over ledges.

40.00 Intersect the old ^{st.} sec. cor. on S. side sec. 31, which is a trapyte stone, 6x8x7 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
I destroy the old cor. and re-establish it in the same place as follows: 6 lks. S. of cor. point for safety I, Set an iron post, 3 ft. long, 1 in in dia., 20 ins. in the ground, on rock, and surrounded by mound of stone, for witness cor. to Standard $\frac{1}{2}$ sec. cor. mkd. on brass cap T 30 S R 4 W W C $\frac{1}{2}$ S 31 in N half and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high; N. of cor.

46.00 Top of ridge, 400 ft. above gulch, bears N. and S.

Retracement 6th Standard Parallel South, Range 4 W- Continued.

Chains. Leave ledges, continue ascent.

60.00 Top of ridge, bears N.60° E. and S.60° W.

Desc.

79.40 Fall 60 lks.N.of the Standard cdr.of secs.31 and 32, which is a trachyte stone 4 x 8 x 7 ins.above ground, firmly set and mkd.and witnessed as described by the surveyor general. This cor.is in head of swale, course S.30° W.

I destroy the old cor., and re-establish it in the same place as follows:

Set an iron post, 3 ft.long, 3 ins.in dia., 12 ins.in the ground, on solid rock, and surrounded by mound of stone, for standard cor.of secs.31 and 32, mkd.on brass cap

T 30 S S 31 in NW., and

R 4 W S 32 in NE.quadrants; from which

A cedar, 24 ins.dia., bears N.60° E. 89 lks.

diat., mkd.T 30 S R 4 W S 32 B T

A pinon pine, 4 ins.dia., bears N.14° W. 8 lks.

diat., mkd.T 30 S R 4 W S 31 B T

The course of the west half of this mile is therefore East 40.00 chs., and the east half is S.89° 09'E.

39.40 chs.

Land, mountainous.

Soil, sandy and rocky, 2d and 3d rate, from 1 to 2 ft. deep; subsoil, gravel and rock.

Timber, cedar and pinon pine, and mahogany.

Undergrowth, sagebrush.

Good grass for grazing.

Mountainous or heavily timbered land 79.40 chs.

June 30, 1911: At the noon hour the sky is overcast, and solar observations are impossible.

East on a retracement line along south side of sec.32

Over mountainous land; through heavy timber and scattering undergrowth. Asc.

Retracement 6th Standard Parallel South, Range 4 W. - Continued.

- Chairs.
- 6.50 Top of ridge, 100 ft. above cor., bears NE. and SW.
 - 20.60 Desc.
Head of hollow, 125 ft. below ridge, course S.
Asc.
 - 28.60 Top of ridge, 100 ft. above hollow, bears N. 70° W. and S. 70° E. Desc.
 - 39.86 Fall 175 lks. N. of the standard $\frac{1}{4}$ sec. cor. on S. side of sec. 32, which is a trachyte stone 5 x 14 x 5 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general.
I destroy the old cor., and re-establish it in the same place as follows:
Set an iron post 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for standard $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 32 in N. half; from which
A pinon pine, 5 ins. dia., bears N. 46° E. 21 lks. dist., mkd. S C $\frac{1}{4}$ S 32 B T
No other trees suitable to mark; raise a mound of stone 2 ft. base, 1 1/2 ft. high N. of cor.
 - 41.60 Head of hollow, 50 ft. below ridge, course NE. Asc.
 - 48.60 Top of spur, 50 ft. above hollow, bears NE. and SW.
Desc. over ledges.
 - 55.90 Leave ledges, bearing N. and S. Continue descent.
 - 79.80 Fall 135 lks. N. of the Standard cor. of secs. 32 and 33, which is a trachyte stone 12 x 12 x 10 ins. above ground, firmly set, mkd. and witnessed as described by the surveyor general.
I destroy the old cor., and re-establish it in the same place as follows:
Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for standard cor. of secs. 32 and 33, mkd. on brass cap
T 30 S S 32 in NW.; and
R 4 W S 33 in NE. quadrants; from which
A cedar, 8 ins. dia., bears N. 30° 30' E. 45 lks.

Retracement 6th Standard Parallel South, Range 4 W.-Continued.

Chains

dist..mkd.T 30 S R 4 W S 33 B T.

A piñon, pine limb, 6 ins. dia., bears N.83°W. 20 lks.

dist..mkd.T 30 S R 4 W S 32 B T.

Note: These are the same trees that were marked for the old cor. but I remarked them and took correct bearings and distances.

The course of the west half of this mile is therefore S.87°30'E. 39.90 chs. and the east half is N.89°26'E., 39.94 chs.

Land, mountainous .

Soil, red sand and rocky; 2nd and 4th rate. 1 to 2 ft. deep.

Subsoil, gravel and rock.

Timber, cedar and piñon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.24 chs.

June 30, 1911.

July 1, 1911: At 7 h 3 m a.m., l.m.t., I set off 38°09'N., on the lat. arc; 23°12'N., on the decl. arc; and determine a meridian with the solar, at the Standard cor. of Secs. 32 and 33.

Thence I run

East, on south bdy. of sec. 33.

Over mountainous land; through dense undergrowth and scattering timber.

Desc. gradually along side of ridge.

20.00 Saddle in ridge, bears NE and SW.

Desc.

31.60 Bottom of hollow, 100 ft. below ridge, course SE.

Asc.

40.33 Fall 7 lks. S. of the Standard $\frac{1}{4}$ sec. cor. on E. side of sec. 33, which is a trachyte stone, 7x7x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

Retracement 6th Standard Parallel South, Range 4 W.-Continued.

Chains

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 12 ins., in the ground, on solid rock, and surrounded by mound of stone, for Standard $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 33 in N half, from which

A pinon pine, 4 ins. dia., bears N. 16° W., 41 lks.

dist. mkd. S C $\frac{1}{4}$ S 33 B T. 3.

No other trees suitable to mark; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

46.00 Top of ridge, 60 ft. above hollow, bears NW and SE.

Desc.

79.96 Fall 7 lks. S. of the standard cor. of secs. 33 and 34, which is a sandstone, 12x18x12 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish the cor. in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground, on solid rock, and surrounded by mound of stone, for Standard cor. of secs. 33 and 34, mkd. on brass cap

T 30 S S 33 in NW.

R 4 W S 34 in NE quadrants, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

The course of the west half of this mile is N. 89° 54' E., 40.33 chs.; and the east half is East 39.63 chs.

Land, mountainous.

Soil, sand and rocky; 2nd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 79.96 chs.

July 1, 1911: At this cor. I set off 23° 10' N., on the decl. arc; and at 0 h 3 m p.m., 1.m.t., I observe the sun on the meridian, the resulting lat. is 38° 09' N., which is the proper lat. nearly.

RETRACEMENT 6TH STANDARD PARALLEL SOUTH, RANGE 4 W.

CHAINS	
	The standard cor. of secs. 34 & 35 being visible, I run N. 89° 46' E. on a retracement line along S. Bdy. sec. 34. Over mountainous land, through dense undergrowth. Desc.
.90	Bottom of hollow, 20 ft. below cor., course NE. Asc.
6.25	Top of ridge, 20 ft. above hollow, bears NE and SW. Desc.
8.40	Old closing cor. of secs. 3 and 4, hereinafter described.
20.90	Road bears NE and SW.
28.40	Telephone line, Circleville to Panguitch, bears NE and SW Foot of descent bears NE and SW. Enter valley.
32.10	County road, bears NE and SW.
32.25	Cor. of fence, bears SW. and N. 89° 46' E.
40.40	Intersect Standard $\frac{1}{4}$ sec. cor. on S. side of sec. 34, which is a white sandstone, 4x10x6 ins. above ground, firmly set, and mkd. and witnessed as described by the Surveyor General. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for standard $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 34 in N. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
63.90	Norton's house bears N. 2.50 chs. dist.
65.90	Irrigating canal, 20 lks. wide, 18 ins. deep, drains NE.
71.15	West bank of Sevier River, 75 lks. wide, 3 ft. deep, course N.
75.90	Mnson's house bears S. 100 lks. dist.
77.40	Irrigation ditch 6 lks. wide, 1 ft. deep, course NE.
80.80	Intersect the Standard cor. of secs. 34 and 35, which is a gray sandstone, 12x10x10 ins. above ground, firmly set, and mkd. and witnessed as described by the Survey- or General. I destroy the old cor. and re-establish it in the same place as follows: Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in

RETRACEMENT 6TH STANDARD PARALLEL SOUTH, RANGE 4 W.

CHAINS

the ground for standard cor. of secs. 34 & 35, mkd. on brass cap

T 30 S S 34 in NW

R 4 W S 35 in NE quadrants; and raise a mound of stone, 3 ft. base, 1½ ft. high, N. of cor.

The course of this mile is therefore N. 89°46'E., 80.80 chs.

Land, mountainous and level.

Soil, sandy and clay loam; 1 to 4 ft. deep.

Subsoil, gravel and clay.

No timber.

Undergrowth, sagebrush.

Good grass.

Mountainous land, or land covered with dense undergrowth

28.40 chs.

July 1, 1911

July 3, 1911: At 7 h. 4 m., a.m.l.m.t. I set off 38°09' N. on the lat. arc; 23°03' N. on the decl. arc; and determine a meridian with the solar at the St. cor. of secs. 34 and 35. Thence I run

N. 89°46'E. on a retracement line along south side sec. 35. Over level valley, along fence between cultivated fields.

- 9.58 West bank of canyon, 20 lks. wide, 18 ins. deep, course NE
- 13.58 Top of low spur, 30 ft. above cor., bears N. 20° E. and S. 20° W. Desc. gradually.
- 20.40 Cor. of fence bears E. and W. and S.
- 21.60 Canal, 20 lks. wide, 18 ins. deep, course SE, same canal.
- 40.40 Fence bears E., W. and S.

Intersect the St. ¼ sec. cor. on S. side sec. 35 which is a gray sandstone, 10x12x8 ins. above ground, firmly set and mkd. and witnessed as described by the Surveyor General. I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in diam., 25 ins. in ground, for Stan. ¼ sec. cor., mkd. on brass cap ¼ S 35 in N. half; dig pits 18x18x12 ins. E. and W. of post, 3 ft. dist.

Retracement 6th Standard Parallel South, Range 4 West.

Chains and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

40.45 Irrigation ditch, 10 lks. wide, 1 ft. deep, course N.

46.10 West bank of canal, 20 lks. wide, 18 ins. deep, course NE.

59.80 NW cor. of stack yard 100 lks. east and West and 200 lks. N. and S.

73.08 Cor. of fence, bears E. and W. and N.

80.38 Fence on W. side of road, bears N. and S.

80.80 Center of road, bears N. and S.

Intersect the Standard cor. of secs. 35 and 36, which is a gray sandstone, 6x12x10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 36 ins. in the ground, (I set the top of post flush with the surface on account of being in the road) for standard cor. of secs. 35 and 36; mkd. on brass cap

T 30 S S 35 in NW.

R 4 W S 36 in NE. quadrants; dig pits, 24x18x12 ins. E. and W. 3 ft. and N. of post, 7 ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.

The course of this mile is therefore N. 89° 46' E., 80.80 chs. Land, level.

Soil, sandy and clay loam; 2nd rate. 2 to 6 ft. deep.

No timber and

Good grass.

Cultivated land on both sides of the fence.

July 3, 1911: At this cor. I set off 23° 01' N., on the decl. arc; and at 0 h 4 m p.m., 1 m.t., I observe the sun on the meridian the resulting lat. is 38° 09' N., which is the proper lat. nearly.

I can see the cor. of Sps. 30 S., Rs. 3 and 4 W.; therefore I run for said cor.

N. 89° 46' E., on a retracement line along the south side sec.

Retracement 6th Standard Parallel South, Range 4 W.

- Chains
36.
Over level land;
- .40 Fence along east side of road, bears N. and S.
40. Enter scattering rabbit brush.
- 40.50 Intersect the old Standard $\frac{1}{4}$ sec. cor. which is a volcanic stone, 5x10x6 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
I destroy the old cor. and re-establish it in the same place as follows:
Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for Standard $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 36 in N half; and dig pits, 18x18x12 ins. E and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 80.46 West fence of lane bears N. and S.
Leave enclosure.
- 80.82 Intersect the Standard cor. of Tps. 30 S., Rs. 3 and 4 W., which is a volcanic stone, 10x10x 8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
I destroy the old cor. and re-establish it in the same place as follows:
Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for Standard cor. of Tps. 30 S., R. 3 and 4 W., mkd. on brass cap
T 30 S in N half.
R 4 W S 36 in NW.
R 3 W S 31 in NE quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
The course of this mile is therefore N. 89° 46' E., 80.82 ch
Land, level valley.
Soil, sandy and clay loam; 2 to 6 ft. deep.
Undergrowth, rabbit brush.
No timber.
Good grass.

Retracement 6th Standard Parallel South, through Range 4 W.

Chains

July 3, 1911.

John R Stewart

U.S. Transitman.

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FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 _____, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of Transitman see book "P" T. 32 S., R. 9 E.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18, 191 _____

The foregoing field notes of the ~~survey of~~ retracement of the Sixth Standard Parallel South, through Range No. 4 West of the Salt Lake Base and Meridian, Utah,

executed by _____ John R. Stewart _____ under his special instructions dated _____ March 27 _____, 191 _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

[Signature]
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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BOOK A-396

H.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

of

Township No. 31 South Range No. 4 West

Of the Salt Lake Base and Meridian,

the State of Utah

EXECUTED BY

John R. Stewart and Co. Quinby Stewart

in the capacity of U. S. ^{Transitmen} ~~Surveyors~~ under instructions dated March 25, 1911, ~~1911~~

issued by the United States Surveyor General to govern surveys included in

Group No. 8, which were approved by the Commissioner of the General Land

Office, April 22, 1911, pursuant to authority contained in the Act of

Congress dated _____, 1911

Survey commenced July 3, 1911.

Survey completed July 19, 1911.

Patr. Sube. 00-63-30 ✓
Sube. 58-34-65 ✓
Close. 2-09-62 ✓

Filed 4/23/12
[Signature]

INDEX DIAGRAM.

Township 31 south, Range 4 West

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31	65	32	57	33	47	34	34	35	22	36

Retracement of Sub. T. 31 S., R. 4 W.

Chains	<p>Survey commenced July 3, 1911, and executed with a W. and L. E. Gurley Explorer's Transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.</p> <p>The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on Mar. 29, 1911.</p> <p>Note: For complete test see book "G" of this survey.</p> <p>I examine the adjustments of the instrument and correct the level and collimation errors, then, at 7h 4m, a.m., l.m.t., I set off 38°09'N. on the lat. arc, 23° 03'N. on the decl. arc; and determine a meridian with the solar, at the closing cor. of secs. 3 and 4 on N. bay. T.31 S., R. 4 W 8.40 chs. E. of stan. cor. of secs. 33 and 34, and is a limestone, 10x15x12 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.</p> <p>I destroy the old cor. and re-establish it in the same place as follows:</p> <p>Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 3 and 4, mkd. on brass cap C C T 30 S R 4 W S 33 S 34 in N. half. R 4 W S 3 in SE., and T 31 S S 4 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, South of cor. Thence I run south on a retracement line bet. secs. 3 and 4. Over mountainous land; through dense sage brush and scattering timber. Descend.</p> <p>7.00 Old road, bears NE. and SW. Enter valley, bears NE. and SW.</p> <p>26.10 Irrigation ditch, 8 lks. wide, 1 ft. deep, course NE.</p> <p>27.80 County road, bears NE. and SW. Leave undergrowth.</p> <p>28.10 West fence of Parker's cultivated farm, bears NE. and SW.</p> <p>28.10 Telephone line Circleville to Panguitch, bears NE. and SW.</p> <p>28.15 Irrigation ditch, 5 lks. wide, 1 ft. deep, course NE. Enter cultivated land, bears same.</p>
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Retracement of Sub. T. 31.S., R. 4 W.

Chains
30.00

Parker's house bears N 66°E. about 2.25 chs. dist.

40.33

Fall 40 lks. W. of the 1/4 sec. cor. bet. secs. 3 and 4, which is a granite stone, 10x10x5 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/4 sec. cor. mkd. on brass cap 1/4 S 4 in W half, and S 3 in E. half; and raise a mound of stone, 2 base, 1 1/2 ft. high, W. of cor.

40.34

Corner of fence, bears S., E., and W.

44.00

Irrigation ditch 5 lks. wide, 18 ins. deep, course N 80°E.

45.00

Corner of fence, bears N. and W.

63.30

Fall 62 lks. West of the witness cor. for secs. 3, 4, 9 and 10, which is a sandstone, 10x10x8 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general.

Note: The course of this line to this cor. being S 0°34'E. I begin at this witness cor. and run S. 0°34'E. bet. secs. 3 and 4, (counting distances from closing cor. on Standard

64.30

Left bank of Sevier River bank, 8 ft. high, course of river NE. Leave cultivated land.

64.95

Right bank of river, 8 ft. high, bears NE. and SW. Water 5 ft. deep, moderate current, sandy bottom.

65.00

Leave valley, bears NE. and SW. Asc. mountain.

80.33

Making the south half of mile 40.00 chs.

Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 3, 4, 9 and 10, mkd. on brass cap T 31 S S 4 in NW. R 4 W S 3 in NE. S 10 in SE., and S 9 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Land, mountainous and valley.

Soil, red sandy loam 3 ft. deep, in valley; gravelly on hills.

Retracement of Sub. T. 31 S., R. 4 W.

Chains

Timber, scattering pinon pine and cedar.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

43.13 chs.

July 3, 1911.

July 5, 1911: At 7h 4m. a.m., l.m.t., I set off 38°09'N. on the lat. arc; 22°53'N. on the decl arc; and determine a meridian with the solar at the witness cor. to cor. of secs. 3, 4, 9 and 10, heretofore described which is 63.30 chs. south of the closing cor. of secs. 3 and 4, heretofore described.

Thence I run

On a retracement of the traverse line in sec. 4 as follows:

N 77°W., 35.00 chs.

S 45°45'W., 15.00 chs.

S 4°W., 14.51 chs. Intersect the old witness 1/4 sec. cor. bet. secs. 4 and 9, which is a granite 12x13x6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the marks on the old cor. but leave the stone standing.

Note: This retracement indicates that the line should be run west on a true line bet. secs. 4 and 9 a distance of 80.00 chs. Therefore I proceed to run said line.

From cor. of secs. 3, 4, 9 and 10, I run

West on a true line bet. secs. 4 and 9.

Over rough mountainous land, through dense undergrowth.

Desc.

.50 Bottom of hollow, 10 ft. below cor. course N. Asc.

3.00 Top of spur, 60 ft. above hollow, bears N. and S. Desc.

10.00 Enter heavy timber, bears N. and S.

15.00 Bottom of hollow, 300 ft. below ridge, course N.

Asc.

27.25 Top of knoll on ridge, 300 ft. above hollow, bears N. and S.

Sub. T. 31 S., R. 4 W.-Continued.

Chains

Desc.

- 55.00 Leave heavy and enter scattering timber, bears N. and S.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 4 in N. half, and S 9 in S. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 42.60 East bank of Sevier River, 6 ft. high, water 3 ft. deep, 400 ft. below ridge, course N.
- 43.35 West bank of river.
- 45.40 County road, bears N. and S.
- 45.60 Telephone line from Circleville to Panguitch, brs. NE. & S.
- 45.86 The old witness cor. already described.
- Leave river bottom and ascent mountain, bears N. and S.
- 55.00 Top of ridge, 350 ft. above river, bears NW. and SE.
- Desc.
- 60.00 Head of hollow, course SE.
- Asc.
- 69.75 Top of spur, 150 ft. above head of hollow, bears NW. and S.
- Enter heavy timber, bears NW. and SE.
- Continue asc.
- 75.00 Top of same ridge, 100 ft. above ridge, bears N 80°E. and S. 80°W. Desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, mkd. on brass cap

T 31 S S 5 in NW.

R 4 W S 4 in NE.

S 9 in SE., and

S 8 in SW. quadrants; from which

A pinon pine, 8 ins. dia., bears N 46°30'E, 1ks. dist., mkd. T 31 S R 4 W S 4 B T

A pinon pine, 12 ins. dia., bears S 54°30'E, 57 lks. dist., mkd. T 31 S R 4 W S 9 B T

A pinon pine, 8 ins. dia., bears S 25°W., 36 lks. dist., mkd. T 31 S R 4 W S 8 B T

A cedar limb, 12 ins. dia., bears N 39°30'W,

Sub. T. 31 S., R. 4 W.- Continued.

Chains	<p>77 lks. dist., mkd. T 31 S R 4 W S 5 B T</p> <p>Land, mountainous.</p> <p>Soil, gravelly and rocky, 3d and 4th rate.</p> <p>Timber, cedar and pinon pine.</p> <p>Undergrowth, sage and rabbit brush.</p> <p>Good grass for grazing.</p> <p>Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.</p>
	<p>North bet. secs. 4 and 5.</p> <p>Over mountainous land, through heavy timber and dense undergrowth. Asc.</p> <p>7.00 Top of ridge, 60 ft. above cor. bears N 60°E. and S 60°W. Desc.</p> <p>18.00 Bottom of hollow, 100 ft. below ridge, course NE. Asc.</p> <p>25.00 Top of ridge, 125 ft. above hollow, bears N 60°W. and S 60°E. Desc.</p> <p>40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 5 in W. half and S 4 in E. half; from which</p> <p style="padding-left: 40px;">A pinon pine, 8 ins. dia., bears S 75°E., 11 lks. dist., mkd. $\frac{1}{4}$ S 4 B T</p> <p style="padding-left: 40px;">A cedar, 5 ins. dia., bears N 60°W., 16 lks. dist., mkd. $\frac{1}{4}$ S 5 B T</p> <p>57.25 Bottom of hollow, 150 ft. below ridge, course SE. Asc.</p> <p>62.00 Wood road, bears N 10°W. and S 10°E.</p> <p>64.00 Wood road, bears N 80°E., and S 80°W.</p> <p>78.00 Top of ridge, 200 ft. above hollow, bears N 70°W. and S 70°E.</p> <p>80.24 Intersect 6th Standard Parallel South, 9.17 chs. N 89°54'E. of the Standard cor. of secs. 32 and 33, heretofore described.</p> <p>Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for closing cor. of secs. 4 and 5, mkd. on brass cap C C T 30 S R 4 W S 32 S 33 in N half.</p>

Sub. T. 31 S., R. 4 W.- Continued.

Chains

R 4 W S 4 in SE., and

T 31 S S 5 in SW. quadrants; from which

A pinon pine, 10 ins. dia., bears S 28°E., 52 lks. dist., mkd. T 31 S R 4 W S 4 B T

A pinon pine, 12 ins. dia., bears S 33°W., 32 lks. dist., mkd. T 31 S R 4 W S 5 B T

Land, mountainous.

Soil, red sand and rocky 8 ins. to 2 ft. deep, subsoil, gravel and rock.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.24 chs.

July 5, 1911.

July 7, 1911: At 7h 5m, a.m., l.m.t., I set off 38°09'N. on the lat. arc; 22°42'N. on the decl. arc; and determine a meridian with the solar at the old witness cor. point bet. secs. 4 and 9 which is 5.86 chs. west of the 1/4 sec.

Thence I run

A retracement of the old traverse line in sec. 9.

S 4°W., 5.00 chs.

S 12°00'W., 28.00 chs.

S 67°15'W., 30.32 chs.

Intersect the old witness cor. to 1/4 sec. cor. bet. secs.

8 and 9, which is a sandstone 11x12x6 ins. above ground, mkd. and witnessed as described by the surveyor general.

Note: To establish the bdys. of sec. 9 according to the original survey, I proceed as follows:

From the cor. of secs. 4, 5, 8 and 9, heretofore described.

I run south bet. secs. 8 and 9.

Over mountainous land, through heavy timber and dense undergrowth.

Desc.

.80 Desc. more abruptly, bears NE. and SW.

Sur. Sub. T. 31 S., R. 4 W.

Chains		
15.00	Bottom of hollow, 250 ft. below cor. course E. Leave heavy and enter scattering timber, bears E. and W. Asc.	
24.00	Top of ridge, 50 ft. above hollow, bears N 70°E. and S 70°W. Desc.	
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 8 in W. half, and S 9 in E. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.	
40.60	Telephone line, Circleville to Panguitch, bears N 70°E. and S 70°W.	
40.70	County road, bears N 70°E. and S 70°W.	
41.85	West bank of west branch of Sevier River, bears N 70°E. and S 70°W., water 3 ft. deep, course N 70°E.	
42.35	East bank of west branch of river.	
44.10	Old witness cor. to $\frac{1}{4}$ sec. cor. bet. secs. 8 and 9, hereto- fore described. West bank of east branch of Sevier river, 10 ft. high, water 18 ins. deep, course NE.	
44.50	East bank of east branch of river.	
45.00	Begin abrupt ascent over volcanic conglomerate ledges, bears NE. and SW.	
50.00	Top of ridge, 100 ft. above river, bears NE. and SW. Desc. abruptly over ledges.	
65.00	Enter heavy timber, bears E. and W.	
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone for cor. of secs. 8 and 9, mkd. on brass cap T 31 S S 8 in NW.	
	R 4 W S 9 in NE. quadrants; from which A pinon pine, 8 ins. dia., bears N 69°E., 45 lks. dist., mkd. T 31 S R 4 W S 9 B T A cedar, 4 ins. dia., bears N 54°W., 12 lks. dist., mkd. T 31 S R 4 W S 8 B T	

Sub. T. 31 S., R. 4 W.- Continued.

Chains

Land, mountainous very rough.
 Soil, red sand and rocky, 2d and 4th rate, about 12 ins. deep.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush and rabbit brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 7, 1911: At this cor. I set off $22^{\circ}40'N.$ on the decl arc; and at 0h 5m₁₀ p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}08'N.$, which is the proper lat. nearly.

From the cor. of secs. 3, 4, 9 and 10.

I run

$S 0^{\circ}02'E.$ bet. secs. 9 and 10.

Over mountainous land, through scattering timber and dense undergrowth.

Asc.

10.00 Top of ridge, 150 ft. above cor. bears E. and W.

Enter heavy timber, bears E. and W.

Desc.

28.00 Bottom of hollow, 200 ft. below ridge, course W.

Asc.

32.25 Top of ridge, 175 ft. above hollow, bears E. and W.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone for $\frac{1}{4}$ sec. cor. of sec. 9 only, mkd. on brass cap $\frac{1}{4} S 9$ in W. half; from

Chains

which

A pinon pine, 10 ins. dia., bears N. 73° W., 31 lks.
dist. mkd. $\frac{1}{2}$ S 9 B T.

43.00 Bottom of hollow, 200 ft. below ridge, course NW.

Asc.

56.00 Top of ridge, 200 ft. above hollow, bears N. 70° W. and S. 70°

E.

Desc.

63.60 Bottom of hollow, 50 ft. below ridge, course NW.

Asc.

68.00 Top of ridge, 100 ft. above hollow, bears N. and W.

Desc.

75.25 Bottom of hollow, 200 ft. below ridge, course W.

Leave heavy and enter scattering timber., bears E. and W.

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the
ground, on solid rock, and surrounded by mound of stone,
for the SE cor. of sec. 9, mkd. on brass cap

T. 31 S. R. 4 W. in N. half.; and
S 9 in NW. quadrants; from which

A cedar, 12 ins. dia., bears N. 75° 30' W., 43 lks.
dist. mkd. T 31 S R 4 W S 9' B T.

Land, mountainous .

Soil, red sand and rocky 12 ins. deep, subsoil, conglomerate
and sandstone.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous & heavily timbered land, or, land covered
with dense undergrowth, 80.00 chs.

East, on a random line along S. bdy of sec. 9 from the cor.
of secs. 8 and 9, heretofore described.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.00 Intersect N. and S. line, at the SE cor. of secs. 9.

Chains

Thence I run

West, on a true line along south bdy. sec. 9.

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

5.00 Top of spur, 50 ft. above cor., bears NW and SE.

Desc.

12.40 Wood road, in bottom of hollow 175 ft. below spur, course N. 30°W.

Asc.

33.00 Leave heavy and enter scattering timber, bears N. and S.

35.00 Top of ridge, 250 ft. above hollow, bears N. and S.

Desc. over ledges.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, 1 or 1/4 sec. of sec. 9 only. mkd. on brass cap 1/2 S 9 in N half from which

A cedar, 12 ins. dia., bears N. 65° 30' W., 65 lks.

dist. mkd. 1/2 S 9 B T.

55.00 Bottom of hollow, 350 ft. below ridge, course N. 30°W.

Asc. over ledges.

63.50 Top of ridge, 60 ft. above hollow, bears N. 10°W. and S. 10°E.

Desc. over ledges.

68.50 Bottom of hollow, 275 ft. below ridge, course N.

Asc. abruptly over ledges.

72.50 Top of steep ascent and ledges, 500 ft. above hollow, bears

N. and S.

Asc. gradually.

80.00 The cor. of secs. 8 and 9.

Land, mountainous, very rough. Soil, sandy loam and rocky about 12 ins. deep, subsoil, rock.

Timber, cedar and pinon pine.

Undergrowth, sage brush,

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

Chains

July 8, 1911: At 7h 5m a.m., l.m.t., I set off $38^{\circ}08'N$. on the lat. arc; $22^{\circ}36'N$. on the decl. arc; and determine a meridian with the solar at the old witness cor. to $\frac{1}{4}$ sec. cor. bet. secs. 8 and 9 which is 4.10 chs. South of the $\frac{1}{4}$ sec. cor.

Thence I run

On a retracement of the traverse line in sec. 8.

S. $67^{\circ}15'W$., 7.30 chs.

S. $45^{\circ}W$., 46.93 chs.

West 0.19 chs.

To the point for the $\frac{1}{4}$ sec. cor. bet. secs. 8 and 17.

The cor. has evidently been washed away by the Sevier

River, as the point for cor. is now in the river.

Therefore I decide to establish the south bdy. of sec.

8 by running west from the cor. of secs. 8 and 9.

From the cor. of secs. 8 and 9, I run

West, on a true line along the south boundary of sec. 8.

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

25.00 Top of ridge 300 ft. above cor., bears N. and S.

Desc. abruptly over ledges.

38.00 Foot of descent 500 ft. below ridge, bears N. and S. 80°

W.

Enter bottom of canon.

39.00 East bank of Sevier River 3 ft. high, course N. bears N. and S. $80^{\circ}W$.

40.00 Falls in river.

45.46 West bank of River, bears N. $80^{\circ}E$. and S. $80^{\circ}W$.

Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in

the ground for witness cor. to $\frac{1}{4}$ sec. cor. of sec. 8

only mkd. on brass cap W C T 31 S R 4 W $\frac{1}{4}$ S 8 in N

half; dig pits 18 x 18 x 12 ins. E. and W. of post 3

ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$

Subdivision T. 31 S., R. 4 W. - Continued.

Chains	ft. high N. of cor.
47.90	County road, bears NE. and SW.:
48.10	Telephone line Circleville to Panguitch, bears NE. and SW. Asc. abruptly from canon bottom.
75.50	Top of ridge, 800 ft. above river, bears N. and S. Desc.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 7 and 8, mkd. on brass cap T 31 S S 7 in NW.; and R 4 W S 8 in NE. quadrants; from which A pinon pine, 6 ins. dia., bears N. 20° E., 93 lks. dist., mkd. T 31 S R 4 W S 8 B T No other trees within limits; raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Land, mountainous, very rough. Soil, gravelly; 3rd rate. Timber, cedar and pinon pine. Undergrowth, sagebrush. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs. July 8, 1911: At this cor. I set off 22° 33' N. on the decl. arc; and at 0h 5m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 08' N., which is the proper lat. nearly.
	N. 0° 01' W. bet. secs. 7 and 8. Over mountainous land; through scattering timber and dense undergrowth. Desc.
8.50	Bottom of hollow, 75 ft. below cor., course E. Asc.
24.50	Top of ridge, 200 ft. above hollow, bears E. and W. Desc. abruptly over ledges.
26.00	Bottom of canon, 150 ft. below ridge, course E. Asc. abruptly over ledges.

Sub.T.31 S.,R.4 W.-Continued.

Chains

3b.50 Top of ridge,300 ft.above hollow,bears E.and W.

Desc. over ledges.

40.00 Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone,

for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 7 in W half and S 8 in E half;from which

A pinon pine,12 ins.dia.,bears N.60°E.,28 lks.

dist..mkd. $\frac{1}{4}$ S 8 B T.

A cedar,18 ins.dia.,bears N.75°W.,20 lks.

dist..mkd. $\frac{1}{4}$ S 7 B T.

54.00 Bottom of canon,500 ft.below ridge,course S.80°E.

Asc.

74.00 Top of ridge,350 ft.above hollow,bears NW and SE.

Desc.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,18 ins.in the ground,on solid rock,and surrounded by mound of stone,

for cor.of secs.5,6,7,and 8,mkd.on brass cap

T.31 S S.6 in NW.

R 4 W S.6 in NE.

S 8 in SE.;and

S 7 in SW.quadrants;from which

A cedar,10 ins.dia.,bears N.40°E.,24 lks.

dist..mkd.T 31 S R 4 W S 5 B T.

A cedar,12 ins.dia.,bears S.49°E.,16 lks.

dist..mkd.T 31 S R 4 W S 8 B T.

A cedar,14 ins.dia.,bears S.55°W.,22 lks.

dist..mkd.T 31 S R 4 W S 7 B T.

A cedar,16 ins.dia.,bears N.5°W.,47 lks.

dist..mkd.T 31 S R 4 W S 6 B T.

Land,mountainous

Soil,red sand and rocky about 10 ins.deep.

Subsoil,rock.

Timber,cedar and pinon pine.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous land,or land covered with dense undergrowth.

80.00 chs.

Sub.T.T.31 S.,R.4 W.,Continued. N.T.,S.14.1.100

Chains

East, on a random line bet. secs 5 and 8.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.10 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 5, 4, 8, and 9.

Thence I run

S. 89° 55' W., on a true line bet. secs. 5 and 8.

Over mountainous land; through heavy timber and dense undergrowth.

Asc.

4.75 Wood road, bears NW and SE.

24.25 Wood road, bears NE and SW.

28.00 Top of ridge, 200 ft. above cor., bears NE and SW.

Ascend along side of ridge!

40.05 Top of ridge, 100 ft. above ridge, bears NW and S. 80° E.

Desc.

Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 5 in N half and S 8 in S half; from which

A pinon pine, 8 ins. dia., bears N. 3° E., 96 lks. dist. mkd. $\frac{1}{4}$ S 5 B T.

A cedar 8 ins. dia., bears S. 53° W., 32 lks. dist. mkd. $\frac{1}{4}$ S 8 B T.

55.00 Begin abrupt descent over ledges, bears N. and S

72.00 Big Pine Creek, 4 lks. wide, 2 ins. deep, in bottom of Big Pine canon, 400 ft. below ridge, course S.

Asc.

80.10 The cor. of secs. 5, 6, 7, and 8.

Land, mountainous.

soil, sandy and rocky; about 12 ins. deep.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Mountainous or heavily timbered land, 80.10 chs.

July 8, 1911.

Sub.T.31 S.,R.4 W.-Continued.

Chains

- July 10, 1911: At 7 h 5 m a.m., l.m.t., I set off $38^{\circ}08'N.$, on the lat.arc; $22^{\circ}22'N.$, on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 7 and 8.
- Thence I run knowing that closing cors. will be necessary on the west boundary of the Tp.
West on a true line bet. secs. 7 and 18.
- Over mountainous land; through scattering timber and dense undergrowth,
- Desc.
- 3.80 Bottom of hollow, 200 ft. below cor., course N.
Asc.
- 8.80 Enter heavy timber, bears N. and S.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 7 in N half and S 18 in S half; from which
- A cedar, 7 ins. dia., bears $N.20^{\circ}W.$, 14 lks.
dist. mkd. $\frac{1}{2}$ S 7 B T.
- A cedar, 7 ins. dia., bears $S.55^{\circ}E.$, 17 lks.
dist. mkd. $\frac{1}{2}$ S 18 B T.
- 45.00 Top of spur, 350 ft. above hollow, bears NE and S.W.
Desc.
- 48.50 Bottom of hollow, 75 ft. below spur, course $N.60^{\circ}E.$
Asc.
- 61.00 Leave heavy and enter scattering timber, bears NE and SW.
- 66.38 Intersect W. bdy. of Tp., 17.60 chs. South, of the cor. of secs. 7, 12, 13, and 18, heretofore described.
- Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, on rock, and surrounded by mound of stone, for closing cor. of secs. 7 and 18., mkd. on brass cap
- T 31 S in N half.
C C R 5 W S 12 S 13 in W half.
R 4 W S 7 in NE.; and
S 18 in SE. quadrants; from which
- A pinon pine, 6 ins. dia., bears $N.80^{\circ}E.$, 160 lks.
dist. mkd. T 31 S R 4 W S 7 B T.

Sub.T.31 S.,R.4 W.-Continued.

Chains

A cedar, 6 ins. dia., bears S. 89° 30' E., 155 lks.
dist. mkd. T 31 S R 4 W S 18 B T.

Note: I destroy all marks on the cor. of secs. 7, 12, 13, and 18 which pertain to secs. 7 and 18.

Land, mountainous.

Soil, gravelly and sandy; 2nd rate. 12 ins. deep. subsoil, clay and gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 66.38 chs.

July 10, 1911: At the noon hour the sky is overcast and solar observations are impossible.

From the cor. of secs. 5, 6, 7, and 8, I run, knowing that closing cor. will be necessary on the W. bdy. of the Tp., West, on a true line bet. secs. 6 and 7.

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

2.50 Top of ridge, 75 ft. above cor., bears N. and S.

Desc.

9.80 Bottom of hollow, 150 ft. below ridge, course S.

Asc.

17.60 Top of spur, 150 ft. above hollow, bears N. and S.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., mkd. on brass cap $\frac{1}{2}$ S 6 in N half. and S 7 in S half; from which

A cedar, 8 ins. dia., bears N. 11° W., 10 lks.
dist. mkd. $\frac{1}{2}$ S 6 B T.

A cedar, 7 ins. dia., bears S. 32° E. 23 lks.
dist. mkd. $\frac{1}{2}$ S 7 B T.

Chains

46.25 Wash, 2 ft. deep, 100 lks. wide, in bottom of canon, 200 ft. below ridge, course SE.

Asc.

54.50 Top of spur, 200 ft. above canon, bears N. and S.

Desc.

60.00 Wash, 100 lks. wide, 2 ft. deep, in canon, 150 ft. below spur, course NE.

Asc.

66.40 Intersect W. bdy. of Tp., 17.82 chs. South of the cor. of secs. 1, 6, 7, and 12, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 6 and 7, mkd. on brass cap

C C T 31 S R 5 W S 1 S 12 in W half;
R 4 W S 6 in NE.; and

T 31 S in N half.

S 7 in SE. quadrants; from which

A pinon pine, 16 ins. dia., bears N. 58° E., 37 lks. dist. mkd. T 31 S R 4 W S 6 B T.

A cedar, 8 ins. dia., bears S. 17° E., 105 lks. dist. mkd. T 31 S R 4 W S 7 B T.

Note: I destroy all marks on the cor. of secs. 1, 6, 7, and 12, which pertain to secs. 6 and 7.

Land, mountainous.

Soil, sandy and rocky. 2nd and 4th rate. subsoil, rock.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass.

Mountainous or heavily timbered land, 66.40 chs.

July 10, 1911

July 11, 1911: At 7 h 5 m a.m., l.m.t., I set off 38° 09'

N., on the lat. arc; 22° 14' N., on the decl. arc; and determine

a meridian with the solar, at the cor. of secs. 5, 6, 7, and

8.

Thence I run

Chains

N.0°01'W.,bet.secs.b and 6.

Over mountainous land;through heavy timber and scattering undergrowth.

Asc.

3.40 Top of spur,60 ft.above cor.,bears E.and W.

Desc.

8.00 Big Pine Creek,4 lks.wide,2 ins.deep,in bottom of Big Pine Creek canon,150 ft.below spur,course S.60°E.

Asc.abruptly over ledges.

35.00 Leave ledges,bears NW and SE.

Asc.more gradually.

40.00 Set an iron post,3 ft.long,1 in.in dia.,18 ins.in the ground,on solid rock,and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 6 in W half and S 5 in E half;from which

A cedar,5 ins.dia.,bears N.20°E.,39 lks.
dist..mkd. $\frac{1}{4}$ S 5 B T.

A pinon pine,5 ins.dia.,bears N.87°W.,63 lks.
dist..mkd. $\frac{1}{4}$ S 6 B T.

50.00 Top of ridge,700 ft.above canon,bears NE and SW.

Desc.

58.50 Bottom of hollow,40 ft.below ridge,course SW.

Asc.

81.47 Intersect 6th Standard Parallel South,8.62 chs.S.87°30'E. of the Standard cor.of sec.31 and 32,heretofore described.

Set an iron post,3 ft.long,2 ins.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone, for closing cor.of secs.b and 6,mkd.on brass cap

C C T 30 S R 4 W S 31 S 32 in N half;
R 4 W S 5 in SE.;and

T 31 S S 6 in SW.quadrants;from which

A cedar,18 ins.dia.,bears S.50°E.,32 lks.
dist..mkd.T 31 S R 4 W S 5 B T.

A cedar,15 ins.dia.,bears S.70°W.,16 lks.
dist..mkd.T 31 S R 4 W S 6 B T.

Sub.T.31 S.,R.4 W.-Continued.

Chains

land,mountainous.

Soil,red sand and rocky 8 to 10 ins.deep.subsoil,rocky.

Timber,cedar and pinon pine.

Undergrowth,sage brush.

Good grass.

Mountainous or heavily timbered land,or land covered with dense undergrowth,81.47 chs.

July 11,1911:At this cor.I set off $22^{\circ}12'N.$,on the decl. arc;and at 0 h 5 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is $38^{\circ}09'N.$,which is the proper lat.nearly:

July 11,1911.

July 6,1911:At 7 h 4 m a.m.,l.m.t.,I set off $38^{\circ}09'N.$, on the lat.arc; $22^{\circ}48'N.$,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.3,4,9,and 10.

Thence I run

East,on a true line on the S.bdy.of sec.3

Over mountainous land;through scattering timber and scattering undergrowth.

Asc.

5.00 Top of ridge,100 ft.above cor.,bears E.and S.

Desc.

13.50 Bottom of hollow,200 ft.below ridge,course N.

Asc.

19.50 Top of spur,100 ft.above hollow,bears N.and S.

Desc.

25.00 Bottom of hollow,150 ft.below spur,course N.

Asc.,over conglomerate ledges.

40.00 Set an iron post,3 ft.long,1 in.in dia.,18 ins.in the ground,on solid rock,and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 3 in N half and

Sub.T.31 S.,R.4 W.-Continued.

- Chains S 10 in S half; from which
- A pinon pine, 4 ins. dia., bears N. 10° E., 16 lks.
dist. mkd. $\frac{1}{4}$ S 3 B T.
- A pinon pine, 4 ins. dia. bears S. 25° E., 47 lks.
dist. mkd. $\frac{1}{4}$ S 10 B T.
- 66.00 Top of ridge, 500 ft. above hollow, bears N. 50° E. and S. 30°
W.
- Desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the
ground, on solid rock, and surrounded by mound of stone,
for the SE. cor. of secs. 3, mkd. on brass cap
T 31 S R 4 W in N half. and
S 3 in NE. quadrant; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Land, mountainous .
- Soil, sandy loam; 2nd rate.
- Timber, cedar and pinon pine.
- Undergrowth; sage brush.
- Good grass .
- Mountainous land, 80.00 chs.
- July 6, 1911: At this cor. I set off 22° 46' N., on the decl.
arc; and at 0 h 4 m p.m. l.m.t.; I observe the sun on the
meridian, the resulting lat. is 38° 09' N., which is the
proper lat. nearly.
- North on a true line on the E. bdy. of sec. 3
- Over mountainous land; through scattering timber and
scattering undergrowth.
- Desc.
- 2.50 Bottom of hollow, 50 ft. below cor., course E.
- Asc.
- 10.00 Top of spur, 60 ft. above hollow, bears E. and W.
- Desc.
- 38.00 Bottom of swale, 200 ft. below ridge, course NE.
- Asc.

Chains

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 3 in W half and S 2 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

60.00 Top of ridge, 76 ft. above hollow, bears E. and W.
Desc.

78.80 Fence, bears N⁴ and SW.

79.35 South bank of canal, 18 lks. wide, 18 ins. deep, course NE.
Foot of descent, 100 ft. below ridge, bears NE and SW.
Enter valley and cultivated land belonging to A. Monson.

80.40 Intersect 6th Standard Parallel South, 8.48 chs. N. 89° 46' E. of the Standard cor. of secs. 32 and 35, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 2 and 3, mkd. on brass cap

C C T 30 S R 4 W S 34 S 35 in N half.

R 4 W S 2 in SE.; and

T 31 S S 3 in SW. quadrants; and dig pits, 24x18x12

ins. crosswise on each line, E and W., 3 ft. and S. of post, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Land, mountainous and level.

Soil, rich sandy loam in valley and gravelly on hills.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass.

Mountainous land, 79:35 chs.

July 6, 1911.

John R Stewart

U.S. Transitman.

Sub.T.31 S.,R.4'W.-Continued.

Chains

Survey commenced July 3, 1911, and executed with a K. and E light mountain transit, No. 20578, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on March 20, 1911.

I examine the adjustments of the instrument and correct the level and collimation errors;

Note: For complete test of instrument see page 23 this book.

At the cor. of secs. 1, 2, 35, and 36, on S. bdy. of Tp., Latitude $38^{\circ}04'17''$ N., longitude, $112^{\circ}14'11''$ W., I set off $38^{\circ}04'N.$, on the lat. arc; $23^{\circ}01'N.$, on the decl. arc; and at 3 h 4 m p.m. l.m.t., I determine a meridian with the solar,

From said cor. of secs. 1, 2, 35 & 36, heretofore described, I run $N.0^{\circ}01'W.$, bet. secs. 35 and 36.

Over mountainous land; through heavy timber and scattered undergrowth.

Asc.

4.00 Top of ridge, 40 ft. above cor., bears $N.60^{\circ}W.$ and $S.60^{\circ}E.$

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 35 in W half and S 36 in E half; from which

A pinon pine, 5 ins. dia., bears $N.62^{\circ}E.$, 15 lks. dist. mkd. $\frac{1}{4}$ S 36 B T.

A pinon pine, 8 ins. dia., bears $N.60^{\circ}W.$, 14 lks. dist. mkd. $\frac{1}{4}$ S 35 B T.

80.00 Set an iron opost, 3 ft. long, 2 ins. in dia., 18 ins. in the ground, on hard gravel, and surrounded by mound of stone, for cor. of secs. 25, 26, 35, and 36, mkd. on brass cap

T 31 S S 26 in NW

R 4 W S 25 in NE.

Sub.T.31 S.,R.4 W.-Continued.

Chains

S.36 in SE.;and

S.35 in SW.quadrants;from which

A pinon pine,4 ins.dia.,bears N.30°30'E.,20 lks.
dist..mkd.T.31 S R 4 W S 25 B T.

A cedar limb,9 ins.dia.,bears S.52°30'E.,22 lks.
dist..mkd.T.31 S R 4 W S 36 B T.

A cedar,8 ins.dia.,bears S.46°W.,40 lks.dist.,
mkd.T.31 S.R.4 W.-S-35 B T.

A pinon pine,4 ins.dia.,bears N.64°30'W.,11 lks.
dist..mkd.T.31 S R 4 W S 26 B T.

Land,mountainous

Soil,sandy and gravelly loam about 1 ft.deep,subsoil,
gravel.

Timber,cedar and pinon pine.

Undergrowth,sage brush.

Good grass.

Mountainous or heavily timbered land,80,00 chs.

July 3,1911:At the cor.I set off 38°05'N.,on the lat.arc;
23°01'N.,on the decl.arc;and at 4 h 4 m a.m.,l.m.t.,I
determine a meridian with the solar,and mark a point
thereof on a stone firmly set in the ground,5.00 chs.
N.of the cor.

July 3,1911.

July 5,1911:At 0 h 43.3 m a.m.,l.m.t.,I observe Polaris
at eastern elongation ,in accordance with the Manual and
and mark a point in the line thus determined by a tack
driven in a wooden plug set in the ground,5.00 chs.N.of the
cor.

At 6 h 30 m a.m.,l.m.t.,I lay off the azimuth of Polaris
1°29' to the west and mark a point in the meridian thus
determined,by cutting a small groove in the stone already
set 5.00 chs.N.of the cor.;this mark falls 0.32 ins.
east of the meridian determined by the solar.

At 7 h 4 m a.m.,l.m.t.,I set off 38°05'N.,on the lat.

Sub. T. 31 S., R. 4 W. - Continued.

Chains

arc; $22^{\circ}53'N.$, on the decl. arc; and determine a meridian with the solar, and mark a point thereof on a stone already set 5.00 chs. N. of the cor.; this mark falls 0.29 ins. east of the mark determined by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about $0'17''$ west and $0'15''$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m., is $N.16^{\circ}11'W.$, the angle thus determined gives the mag. decl. $16^{\circ}11'E.$

Thence I run

East, on a random line bet. secs. 25 and 36.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.82 Intersect E. bdy. or Tp., 19 lks. N. of the cor. of secs. 25, 30, 31, and 36, heretofore described.

Thence I run

$N.89^{\circ}52'W.$, on a true line bet. secs. 25 and 36.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc. gradually.

32.20 Wood road, bears N. and S.

34.00 Bottom of hollow, 100 ft. below cor., course N.

Asc.

39.91 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S. 25 in N. half. and S 36 in S half; from which

A pinon pine, 4 ins. dia., bears $N.4^{\circ}E.$, 6 lks.

dist. mkd. $\frac{1}{4}$ S 25 B T.

A pinon pine, 8 ins. dia., bears $S.41^{\circ}W.$, 32 lks.

dist. mkd. $\frac{1}{4}$ S 36 B T.

47.00 Wash, 20 lks. wide, 4 ft. deep, course $N.30^{\circ}W.$

66.00 Top of ridge, 60 ft. above hollow, bears N. and S.

Desc.

75.00 Bottom of hollow, 50 ft. below ridge, course N.

Asc.

Sub.T.31 S.,R.4 W.-Continued.

Chains	
78.00	Top of ridge, 50 ft. above hollow, bears N. and S. Desc.
79.82	The cor. of secs. 25, 26, 35, and 36, Land, mountainous Spil, sandy loam mixed with gravel; 2nd rate. Timber, cedar and pinon pine. Undergrowth, sage brush. Good grass for grazing. Mountainous or heavily timbered land, 79.82 chs. N. 0° 01' W., bet. secs. 25 and 26. Over mountainous land; through scattering timber and dense sage brush. Desc.
5.90	Road, bears N. 20° E. and S. 20° W.
7.35	Bottom of canon, 120 ft. below cor., course NE. Asc.
17.60	Wood road, bears E. and W.
21.50	Ledge, 20 ft. high, bears E. and W.
39.30	Top of ridge, 250 ft. above hollow, bears N. 80° E. and S. 80° W. Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 26 in W half and S 25 in E half; from which A pinon pine, 12 ins. dia., bears S. 60° E., 288 lks. dist. mkd. $\frac{1}{2}$ S 25 B. T. A cedar, 10 ins. dia., bears S. 20° W., 13 lks. dist. mkd. $\frac{1}{2}$ S 26 B. T.
49.00	Bottom of hollow, 140 ft. below ridge, course E. Asc.
52.65	Top of ridge 150 ft. above hollow, bears N. 65° W. and S. 65° E. Desc.
69.50	Bottom of hollow, 100 ft. below ridge, course S. 40° E. Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in the dia., 24 ins. in the

Sub.T.31 S.,R.4 W.-Continued.

Chains

ground, for cor. of secs. 23, 24, 25, and 26, mkd. on brass cap

T 31 S B 23 in NW.

R 4 W S 24 in NE.

S 25 in SE.; and

S 26 in SW. quadrants; from which

A pinon pine, 10 ins. dia., bears N. 20° E., 126 lks. dist. mkd. T 31 S R 4 W S 24 B T.

A pinon pine, 6 ins. dia., bears S. 25° 30' E., 30 lks. dist. mkd. T 31 S R 4 W S 25 B T.

A balsam, 4 ins. dia., bears S. 23° 45' W., 25 lks. dist. mkd. T 31 S R 4 W S 26 B T.

A pinon pine, 7 ins. dia., bears N. 38° W., 112 lks. dist. mkd. T 31 S R 4 W S 23 B T.

Land, mountainous

Soil, sandy loam and gravelly; 1 to 2 ft. deep subsoil, clay and gravel.

Timber, cedar, pinon pine and balsam.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 80.00 chs.

July 5, 1911: At this cor. I set off 32° 51' N., on the decl. arc; and at 0 h 4 m p.m., 1 m.t., I observe the sun on the meridian, the resulting lat. is 38° 06' N., which is the proper lat. nearly.

S. 89° 52' E., on a random line bet. secs. 24 and 25.

40.00 Set temp. 1/4 sec. cor.

79.70 Intersect E. bdy. of Tp., 12 lks. S. of the cor. of secs. 19, 24, 25, and 30, heretofore described.

Thence I run

N. 89° 57' W., on a true line bet. secs. 24 and 25.

Over mountainous land; through heavy timber.

Desc.

11.75 Lost Creek, 4 lks. 2 ins. deep, in bottom of canon, 150 ft.

Sub.T.31 S.,R.4 W.-Continued.

- Chains below cor., course N.10°E.
Asc.
- 33.50 Wood road, bears N.10°E. and S.10°W.
- 37.50 Wood road, bears NE. and SW.
- 39.30 Wash, 30 lks. wide, course N.10°E.
- 39.85 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 24 in N half and S 25 in S half; from which
A pinon pine, 8 ins. dia., bears N.45°W., 120 lks. dist. mkd. $\frac{1}{4}$ S 24 B T.
A pinon pine, 7 ins. dia., bears S.35°E., 110 lks. dist. mkd. $\frac{1}{4}$ S 25 B T.
- 60.90 Top of ridge, 400 ft. above canon, bears N.60°W. and S.60°E.
Desc.
- 63.70 Bottom of hollow, 250 ft. below ridge, course S.60°E.
Asc.
- 76.70 Top of ridge, 150 ft. above hollow, bears N.30°W. and S.30°E.
Desc.
- 79.70 Cor. of secs. 23, 24, 25, and 26.
Land, mountainous.
Soil, sandy and gravelly loam; 2nd rate. 2 ft. deep.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous or heavily timbered land, 79.70 chs.

N.0°01'W., bet. secs. 23 and 24.
Over mountainous land; through heavy timber and scattering undergrowth.
Asc.
- 4.10 Top of ridge, 25 ft. above cor., bears N.30°W. and S.30°E.
Desc.
- 8.00 Bottom of hollow, 100 ft. below ridge, course SE.
Asc.
- 20.35 Top of ridge, 650 ft. above hollow, bears N.80°E. and S.80°W.
Desc.

Sub.T.31 S.,R.4 W.-Continued.

Chains

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground for $\frac{1}{4}$ sec. cor., on solid rock, and surrounded by mound of stone, mkd. on brass cap $\frac{1}{4}$ S 23 in W half and S 24 in E half; from which

A pinon pine, 8 ins. dia., bears N. 75° E., 20 lks.

dist. mkd. $\frac{1}{4}$ S 24 B T.

A pinon pine, 4 ins. dia., bears S. 45° W., 120 lks.

dist. mkd. $\frac{1}{4}$ S 2 3 B T.

75.00 Foot of descent, 800 ft below ridge, bears E. and W.

Enter valley.

Leave heavy and ever scattering timber, bears E. and W.

Enter dense sage brush and rabbit brush.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, mkd. on brass cap

T 31 S S 14 in NW.

R 4 W S 13 in NE.

S 24 in SE.; and

S 23 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous .

Soil, sandy and gravelly loam; 2nd rate. 2 to 3 ft. deep.

Timber, cedar and pinon pine.

Undergrowth, sage and rabbit brush.

Good grass .

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 5, 1911.

July 6, 1911: At 7 h 4 m a.m., l.m.t., I set off 38° 07' N. ~~which~~ on the lat. arc; 22° 48' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 13, 14, 23, and 24.

Thence I run

S. 89° 57' E., on a random line bet. secs. 13 and 24.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

Chains

- 79.80 Intersect E.bdy.of Tp., 7 lks.S.of the cor.of secs. 13,18, 19, and 24, heretofore described.
Thence I run
West, on a true line bet.secs.13 and 24.
Over mountainous land; through scattering timber and dense undergrowth.
Desc.Ridge.
- 4.25 Foot of descent, 60 ft. below ridge, bears N. and S.
Wash, 20 lks. wide, 3 ft. deep, course N. 20° W.
Enter valley.
- 4.50 Road, bears N. 20° W. and S. 20° E.
- 5.50 Wash, 15 lks. wide, 3 ft. ^{deep} course N. 25° W.
- 9.50 Wood^d Road, bears NW. and SE.
- 12.10 Lost Creek, 3 lks. wide, 3 ins. deep, course NW.
- 16.50 Wash, 20 lks. wide, 4 ft. deep, course NW.
- 24.40 Wash, 15 lks. wide, 3 ft. deep, course N. 60° W.
- 24.60 Irrigation ditch, 4 lks. wide, 1 ft. deep, course N. 60° W.
- 28.25 Same ditch, course S. 80° W.
- 29.25 Same ditch, course N. 80° W.
- 35.25 Same ditch, course S. 60° W.
- 39.90 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 13 in N half and S 24 in S half; from which
A pinon pine, 4 ins. dia., bears N. 10° W., 55 lks.
dist. mkd. $\frac{1}{4}$ S 13 B. T.
A cedar, 5 ins. dia., bears S. 2° E., 90 lks.
dist. mkd. $\frac{1}{4}$ S 24 B. T.
- 45.20 Leave timber, bears N. and S.
- 60.00 Top of low spur, bears NW and SE.
Desc.
- 70.00 Same ditch, 4 lks. wide, 1 ft. deep, course NW.
- 79.80 The cor. of secs. 13, 14, 23, and 24.
Land, mountainous and nearly level valley.
Soil, sandy and clay loam mixed with rock.
Timber, cedar and pinon

Chains

Undergrowth, sage and rabbit brush.

Good grass .

Mountainous land, or land covered with dense undergrowth,

79.80 chs.

N.0°01'W., bet. secs. 13 and 14.

Over nearly level valley; through dense undergrowth.

Desc. gradually.

- .15 Irrigation ditch, 4 lks. wide, 1 ft. deep, course W.
- 23.00 Wash, 20 lks. wide, 3 ft. deep, course NW.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 lks. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap, $\frac{1}{2}$ S. 14 in W half and S 13 in E half; dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 46.00 Wash, 60 flks. wide, $3\frac{1}{2}$ ft. deep, course W.
- 60.00 Wash, 65 lks. wide, 5 ft. deep, course N. 80° E.
- 75.00 Wash, 40 lks. wide, 6 ft. deep, course N. 60° E.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 11, 12, 13, and 14, mkd. on brass cap
 T 31 S S 11 in NW.
 R 4 W S 12 in NE.
 S 13 in SE; and
 S 14 in SW. quadrants; dig pits, 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- Land, level.
- Soil, sandy and clay loam 2 ft. deep. subsoil, clay.
- No timber,
- Undergrowth, sage and rabbit brush.
- Good grass for grazing.
- Land covered with dense undergrowth, 80:00 chs.
- Note: The camp of Ellis Chamberlain bears, N. 37° 30' W., 27.00 chs. dist. He has about 20 acres of ploughed land about

Chains

in the center of the $SE\frac{1}{4}$ of sec.11.

East, on a random line bet.secs.12 and 13.

40.00 Set temp. $\frac{1}{2}$ sec.cor.

80.00 Intersect N.and S.line, 7 lks.S.of the cor.of secs.

7,12,13,and 18;heretofore described on E.bdy.of Tp.

Thence I run

S.89°57'W., on a true line bet.secs.12 and 13.

Over level land;through dense sage brush.

Desc.gently.

6.40 Wood road,bears N.30°W.and S.30°E.

14.00 Wash,25 lks.wide,3 ft.deep,course NE..

40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{4}$ sec.cor.mkd.on brass cap $\frac{1}{2}$ S 12 in N half and S 13 in S half;dig pits,18x18x12 ins.,E.and W.of.post, 3 ft.dist.;and raise a mound of earth,3 $\frac{1}{2}$ ft.base,1 $\frac{1}{2}$ ft.high N.of cor.

60.00 Wash,20 lks.wide,3 ft.deep,course N.20°W.

61.00 Wood road,bears N.15°W.and S.15°E.

68.40 Lost ^{Creek} ₁₃ lks.wide,5 ft.deep,course N.20°W.

79.10 Wash,20 lks.wide,3 ft.deep,course N.30°W.

80.00 The cor.of secs.11,12,13,and 14.

Land,level .

Soil,sandy and gravelly loam;2 ft.deep,subsoil,clay.

No timber.

Undergrowth,sage and rabbit brush and greasewood.

Good grass .

Land covered with dense undergrowth,80.00 chs.

July 6,1911:At this cor.I set off 22°46'N.,on the decl. arc;and at 0 h 4 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 38°08'N.,which is the proper lat.nearly.

N. 0°01'W.,bet.secs.11 and 12.

Sub.T.31 S.,R.4 W.-Continued.

- Chains
 Over level land; through dense undergrowth.
 Desc. gradually.
- 2.30 Wash, 40 lks. wide, 3 ft. deep, course N.70°W.
- 26.70 Wash, 70 lks. wide, 6 ft. deep, course N.30°W.
 Lost Creek, 3 lks. wide in bottom.
- 28.00 Corral claimed by Mr. Fulmer, bears West 4.75 chs. dist.
- 31.20 Loren Fulmer's house bears West 4.75 chs. dist.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{2}$ S 11 in W half and S 12 in E half; dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 58.70 Road, bears N.30°W. and S.30°E.
- 60.00 Note: There is about 20 acres of ploughed land near the NE $\frac{1}{4}$ sec. 11.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, mkd. on brass cap T 31 S S 2 in NW.
 R 4 W S 1 in NE.
 S 12 in SE; and
 S 11 in SW. quadrants; and dig pits, 18x18x12 ins. in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
 Land, level.
 Soil, sandy and clay loam about 8 ft. deep, subsoil, clay and gravel.
 No timber.
 Undergrowth, sage, rabbit brush and greasewood.
 Good grass.
 Land, covered with dense undergrowth, 80.00 chs. N.89°57'E., on a random line bet. secs. 1 and 12.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 79.90 Intersect N. bdy. of Tp., 2 lks. N. of the cor. of secs. 1, 6, 7, and 12, heretofore described.

Chains

Thence I run

S, 89°58'W., on a true line bet. secs. 1 and 12.

Over level land; through dense undergrowth.

7.00 Wood road, bears NW. and SE.

9.30 Road, bears NW and SE.

39.95 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec. cor. mkd. on brass cap 1/4 S 1 in N half and S 12 in S half; dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

48.00 Road, bears NW and SE.

69.60 Enter ploughed land, bears N. and S.

71.40 Leave ploughed land, bears N. and S.

79.90 The cor. of secs. 1, 2, 11, and 12.

Land, level.

Soil, sandy and gravelly loam; clay subsoil.

No timber.

Undergrowth, sage and rabbit brush and greasewood.

Good grass

Land covered with dense undergrowth, 79.90 chs.

N. 0° 01' W., bet. secs. 1 and 2.

Over level land; through dense undergrowth.

Desc. gradually.

27.00 Wood road, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec. cor. mkd. on brass cap 1/4 S 2 in W half and S 1 in E half; dig pits, 18x18x12 ins. N. and S. of post, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

42.30 Fence, bears E. and W.

Enter enclosed field.

62.88 Intersect 6th Standard Parallel South, 19.00 chs. N. 89° 46' E., of the standard cor. of secs. 35 and 36, heretofore Described.

Chains

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 1 and 2, mkd. on brass cap
 C C T 30 S R 4 W S 35 ■ 36 in N. half.
 E 4 W S 1 in SE.; and
 T 31 S S 2 in SW. quadrants; dig pits, 24x18x12 ins. crosswise on each line, E. and W. 3 ft. and S. of post, 7 ft. dist.; and raise a mound of earth, 4 ft. base, 2½ ft. high, S. of cor.

Land, level.

Soil, sandy and clay loam; 2nd rate.

No timber.

Undergrowth, sage and rabbit brush.

Good grass.

Land covered with dense undergrowth, 62.88 acs.

July 6, 1911.

July 7, 1911: At 7 h 5 m a.m., l.m.t., I set off 38°04' N., on the lat. arc; 22°42' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 2, 3, 34, and 35. on S. bdy. of Tp., heretofore described.

Thence I run

N. 0°01' W., bet. secs. 34 and 35.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

2.00 Bottom of hollow, 40 ft. below cor., course E.

Asc.

20.00 Top of ridge, 250 ft. above hollow, bears E. and W.

Desc.

33.25 Bottom of hollow, 250 ft. below ridge, course SE.

Leave heavy and enter scattering timber, bears NW and SE.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor. mkd. on brass cap ¼ S 34-IN W half

Sub.T.31 S.,R.4 W.-Continued.

Chains

and S 35 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

55.00 Top of ridge, 75 ft. above hollow, bears E. and W.

Desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, mkd. on brass cap

T 31 S S 27 in NW.

R 4 W S 26 in NE.

S 35 in SE.; and

S 34 in SW. quadrants; dig pits, 18x18x12 ins., in each sec. $5\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base, $2\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous .

Soil, red sand and rocky about 12 ins. deep. Subsoil, rocky.

Timber, cedar, pinon pine; and mahogany.

Undergrowth, sage brush.

Good grass.

Mountainous or heavily timbered land, 80.00 chs.

July 7, 1911: At this cor. I set off $22^{\circ}40'N.$, on the decl. arc; and at 0 h 5 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}05'N.$, which is the proper lat. nearly.

East, on a random line bet. secs. 26 and 35.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.90 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 25, 26, 35, and 36.

Thence I run

N. $89^{\circ}55'W.$, on a true line bet. secs. 26 and 35.

Over mountainous land; through heavy timber and dense undergrowth.

Desc.

3.00 Wood road, bears N. $15^{\circ}E.$ and S. $15^{\circ}W.$

15.00 Bottom of hollow, 200 ft. below cor., bourse NE.

Asc.

Sub.T.31 S.,R.4 W.-Continued.

Chains	
15.30	Wood road, bears NE and SW.
39.95	Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 26 in N half and S 35 in S half from which
	A pinon pine, 4 ins. dia., bears N. 31° W., 21 lks.
	dist. mkd. $\frac{1}{4}$ S 26 B T.
	A pinon pine, 10 ins. dia., bears S. 48° W., 38 lks.
	dist. mkd. $\frac{1}{4}$ S 35 B T.
50.50	Top of ridge, 300 ft. above hollow, bears NE and SW.
	Desc.
70.00	Leave timber, bears N. and S.
72.00	Enter scattering timber, bears N. and S.
79.90	The cor. of secs. 26, 27, 34, and 35.
	Land, mountainous.
	Soil, red sand and rocky; about 18 ins. deep subsoil, gravel.
	Timber, cedar and pinon pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, 79.90 chs.
	N. 0° 01' W., bet. secs. 26 and 27.
	Over mountainous land; through dense sage brush.
	Desc.
9.00	Bottom of hollow, 60 ft. below corner, course E.
	Asc.
10.50	Enter heavy timber, bears E. and W.
18.00	Ledge, 30 ft. high, bears E. and W.
30.00	Top of ridge, 200 ft. above hollow, bears N. 60° E. and S. 60° W.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 27 in W half and S 26 in E half; from which

Sub.T.31 S.,R. 4 W.-Continued.

Chains

- A pinon pine, 6 ins. dia., bears N.10°E., 18 lks.
dist..mkd. $\frac{1}{2}$ S 26 B T.
- A pinon pine, 8 ins. dia., bears N.20°W., 29 lks.
dist..mkd. $\frac{1}{2}$ S 27 B T.
- 45.20 Ledge, 20 ft. high, bears E. and W.
- 49.00 Bottom of hollow, 120 ft. below ridge, course N.60°W.
Asc.
- 55.00 Top of ridge, 60 ft. above hollow, bears N.80°E. and S.80°W.
Desc.
- 61.00 Bottom of hollow, 40 ft. below ridge, course S.70°W.
Asc.
- 65.00 Top of ridge, 50 ft. above hollow, bears N.70°E. and S.70°W.
Desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in the dia., 24 ins. in the
ground, for cor. of secs. 22, 23, 26, and 27, mkd. on brass cap
T 31 S S 22 in NW.
R 4 W S 23 in NE.
S 26 in SE.; and
S 27 in SW. quadrants; from which
A pinon pine, 5 ins. dia., bears N.32°E., 14 lks.
dist..mkd. T 31 S R 4 W S 23 B T.
A pinon pine, 5 ins. dia., bears S.41°E., 19 lks.
dist..mkd. T 31 S R 4 W S 26 B T.
A cedar, 8 ins. dia., bears S.52°W., 12 lks.
dist..mkd. T 31 S R 4 W S 27 B T.
A pinon pine, 5 ins. dia., bears N.12°W., 70 lks.
dist..mkd. T 31 S R 4 W S 22 B T.

land, mountainous .

Soil, sandy and gravelly loam; 2nd rate. subsoil, clay and gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass .

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.00 chs.

July, 7, 1911.

Chains

July 8, 1911: At 7 h 5 m a.m., l.m.t., I set off 38°06' N., on the lat. arc; 22°36' N., on the decl. arc; and determine a meridian, with the solat., at the cor. of secs. 22, 23, 26, and 27.

Thence I run

S. 89°55' E., on a random line bet. secs. 23 and 26.

40.00 Set temp. 1/4 sec. cor.

80.00 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 23, 24, 25, and 26.

Thence I run

West, on a true line bet. secs. 23 and 26.

Over mountainous land; through heavy timber and dense undergrowth.

Asc.

20.00 Top of ridge, 200 ft. above cor., bears N. 30° W. and S. 30° E.

Desc.

23.00 Head of hollow, 25 ft. below ridge, course N. 70° W.

Asc.

26.00 Top of ridge, 30 ft. above hollow, bears NW and SE.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/4 sec. cor. on brass cap, 1/4 S 23 in N half and S 26 in S half; from which

A pinon pine, 4 ins. dia., bears N. 50° W., 22 lks. dist. mkd. 1/4 S 23 B T.

A pinon pine, 5 ins. dia., bears S. 30° E., 13 lks. dist. mkd. 1/4 S 26 B T.

Head of hollow, 230 ft. below ridge, course N. 20° W.

Asc.

45.50 Top of ridge, 50 ft. above hollow, bears N. 70° W. and S. 70° E.

Desc.

72.20 Bottom of hollow, 300 ft. below ridge, course N. 10° W.

Asc.

79.00 Top of ridge, 70 ft. above hollow, bears N. 15° E. and S.

Desc.

80.00 The cor. of secs. 22, 23, 26, and 27.

Sub.T.31 S.,R.4 W.-Continued.

Chains

Land, mountainous
 Soil, sandy and rocky; 2nd and 4th rate.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 Good grass.

Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

N.0°01'W., bet. secs. 22 and 23.

Over mountainous land; through heavy timber and dense
 sage brush.

Desc.

19.00 Wood road, bears N.60°E. and S.60°W.

19.20 Bottom of hollow, 50 ft. below ridge, course N.60°E.

Asc.

26.50 Top of ridge, 60 ft. above hollow, bears E. and W.

Desc.

35.00 Bottom of hollow, 20 ft. below ridge, course N.70°E.

Leave heavy and enter scattering timber, Asc.

39.00 Top of ridge, 30 ft. above hollow, bears E. and W.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the
 ground, on rock, and surrounded by mound of stone, for
 $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 22 in W half and S 23
 in E half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft.
 high, W. of cor.

45.00 Bottom of hollow, 15 ft. below ridge; course S.60°E.

Asc.

46.00 Leave timber, bears E. and W.

56.00 Top of ridge, 40 ft. above hollow, bears N.70°W. and S.70°E.

Desc.

64.00 Bottom of hollow, 20 ft. below ridge, course N.60°E.

Asc.

68.00 Top of ridge, 25 ft. above hollow, bears NE and SW.

Desc.

Chains

73.50 Bottom of hollow, 20 ft. below ridge, course N. 80° E.

Asc.

75.00 Wood road, bears NE and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 14, 15, 22, and 23, mkd. on brass cap

T 31 S S 15 in NW.

R 4 W S 14 in NE.

S 23 in SE.; and

S 22 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Land, mountainous

Soil, red sand and rocky; 2nd and 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 8, 1911: At the noon hour the sky is overcast and solar observations are impossible.

East, on a random line bet. secs. 14 and 23.

40.00 Set temp. ¼ sec. cor.

80.08 Intersect N. N. and S. line, 12 lks. S. of the cor. of secs. 13, 14, 23 and 24.

Thence I run

S, 89° 55' W., on a true line bet. secs. 14 and 23.

Over level valley.

Through dense undergrowth.

Desc. gently.

23.90 Wood road, bears N. 30° W. and S. 30° E.

37.20 Wash, 70 lks. wide, 3 ft. deep, course N. 30° E.

40.04 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the

ground, for ¼ sec. cor. mkd. on brass cap ½ S 14 in N half and S 23 in S half; dig pits, 18x18x12 ins. E. and W. of post,

- Chains
 3 ft.dist.;and raise a mound of earth,3½ ft.base,1½ ft.
 high,N.of cor.
- 18.50 Wood road,bears N.10°E.and S.10°W.
 Leave valley,bears N.10°E.and S.10°W.
 Asc.
- 57.50 Top of ridge,100 ft.above valley,bears N.and S.
 Desc.
- 55.50 Bottom of hollow,20 ft.below ridge,course N.10°E.
 Asc.
- 74.00 Wood road;bears NE and SW.
- 80.08 The cor.of secs.14,15,22,and 23.
 Land,mountainous and level. slopes north.
 Soil,sandy and gravelly loam ;2nd rate.clay subsoil.
 No timber,
 Undergrowth,sage brush.
 Good grass.
 Mountainous land,or land covered with dense undergrowth,
 80.08 chs.
 July 8,1911;
- July 10,1911:At 7 h 5 m a.m.,1.m.t.,I set off 38°08'N.
 on the lat.arc;22°22'N.,on the decl.arc;and determine a
 meridian with the solar,at the cor.of secs.14,15,22,and
 23.
 Thence I run
 N.0°01'W.,bet.secs.14 and 15.
 Over mountainous land;through dense undergrowth. and
 scattering timber.
 Desc.
- 9.00 Bottom of hollow,25 ft.below cor.,course N.80°E.
 Asc.
- 20.00 Top of ridge,40 ft.above hollow,bears N.70°W.and S.70°E.
 Desc.
- 66.50 Wash,15 lks.wide,3 ft.deep,course E.
 Enter valley,bears E.and W.

Chains

- 35.10 Road, bears NE and SW.
- 39.30 Wash, 20 lks. wide, 4 ft. deep, course N. 80° E.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 14 in W half and S 15 in E half; from which
 A pinon pine, 16 ins. dia., bears S. 30° E., 44 lks. dist. mkd. $\frac{1}{4}$ S 14 B T.
 A cedar, 6 ins. dia., bears S. 60° W., 70 lks. dist. mkd. $\frac{1}{4}$ S 15 B T.
- 60.00 Wash, 16 lks. wide, 5 ft. deep, course N. 70° E.
- 66.00 Wash, 12 lks. wide, 6 ft. deep, course E.
- 67.00 Wood road, bears N. 65° E. and S. 65° W.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 10, 11, 14, and 15, mkd. on brass cap
 T 31 S S 10 in NW.
 R 4 W S 11 in NE.
 S 14 in SE.; and
 S 15 in SW. quadrants; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. and, mountainous and level.
 Soil, sandy and clay loam; 2nd rate. 1 to 3 ft. deep.
 Subsoil, gravel and clay.
 Timber, cedar and pinon.
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous land, or land covered with, dense undergrowth
- 80.00 chs.
 July 10, 1911: At this cor. I set off 22° 19' N., on the decl arc; and at 0 h 5 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 08' N., which is the proper lat. nearly.
- N. 89° 55' E., on a random line bet. secs. 11 and 14.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.

Sub.T.31 S.,R.4 W.-Continued.

Chains

- 80.00 Intersect N. and S. line, 10 lks. N. of the cor. of secs. 11, 13, 13, and 14.
Thence I run
S. 89° 59' W., on a true line bet. secs. 11 and 14.
Over level land; through dense sage and rabbit brush.
- 17.60 Wash, 40 lks. wide, 6 ft. deep, course NW.
- 24.00 Wash, 75 lks. wide, 2 ft. deep, course N. 30° W.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 11 in N half and S 14 in S half; dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 49.00 Wash, 14 lks. wide, 4 ft. deep, course N. 30° W.
- 54.00 Wash, 12 lks. wide, 3 ft. deep, course N. 20° W.
- 57.60 Road, bears N. 30° W. and S. 30° E.
- 80.00 The cor. of secs. 10, 11, 14, and 15.
Land, level.
Soil, sandy and clay loam; 2nd rate 2 ft. deep. subsoil clay.
No timber.
Undergrowth, sage and rabbit brush.
Good grass.
Land covered with dense undergrowth, 80.00 chs.
- West, on a true line bet. secs. 10 and 15.
Over level land; through dense undergrowth, and timber.
Asc. gently.
- 15.00 Leave valley, bears N. and S.
Asc.
- 32.00 Top of ridge, 400 ft. above valley, bears N. 70° W. and S. 70° E.
Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 10 in N half and S 15 in S half; from which

Sub.T.31 S.,R.4 W.-Continued.

Chains

- A pinon pine, 6 ins. dia., bears N.10°W., 26 lks.
dist. mkd. $\frac{1}{4}$ S 10 B T.
- A cedar, 8 ins. dia., bears S.80°W., 50 lks.
dist. mkd. $\frac{1}{4}$ S 15 B T.
- 45.00 Bottom of hollow, 30 ft. below ridge, course S.70°E.
Asc.
- 48.00 Ledge, 30 ft. high, bears N. and S.
- 57.40 Top of ridge, 350 ft. above hollow, bears N.15°W. and S.15°E.
Desc.
- 63.00 Bottom of hollow, 20 ft. below ridge, course N.60°W.
Asc.
- 67 00 Top of ridge, 40 ft. above hollow, bears NW and SE.
Desc.
- 91.29 Intersect N. and S. line 17.52' chs. North of the SW
cor. of sec. 9, heretofore described.
- Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
ground, for closing cor. of secs. 10 and 16 (I mark this cor.
for sec. 16 knowing that it will be for said sections
when the line bet. secs. 15 and 16 is run) mkd. on brass cap
T 31 S R 4 W in N half.
C C S 9 in W half;
S 10 in NE.; and
S 16 in SE.; quadrants; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.
and, mountainous land level.
Soil, gravelly; 3rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth,
91.29 chs.

July 10, 1911.

Sub.T.31 S., R.31 E.-Continued.

- Chains
- July 11, 1911: At 7 h b m a.m., l.m.t., I set off $38^{\circ}09'N.$, on the lat.arc; $22^{\circ}14'N.$, on the decl.arc; and determine a meridian with the solar, at the cor.of secs.1, 2, 11, and 12.
- thence I run
- S. $89^{\circ}59'W.$, on a true line bet.secs.2 and 11.
- Over level land; through dense undergrowth.
- Desc.gradually.
- 8.30 Wood road, bears N. $20^{\circ}W.$ and S. $20^{\circ}E.$
- 18.40 Wood road, bears N. and S.
- 18.60 Wash, 40 lks.wide, 4 ft.deep, course N. $10^{\circ}W.$
- Lost
Creek, 4 lks.wide, 3 ins.deep, in wash.
- 36.30 Wash, 30 lks.wide, 6 ft.deep, course N. $10^{\circ}W.$
- 40.00 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the ground, for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 2 in N half and S 11 in S half; dig pits, 18x18x12 ins.E.and W.of post, 3 ft.dist.; and raise a mound of earth, $3\frac{1}{2}$ ft.base, $1\frac{1}{2}$ ft. high, N1st cor.
- 42.00 Leave valley, bears N. and S. Enter timber.
- Asc.
- 52.30 Top of ridge, 70 ft.above valley, bears N. and S.
- Desc.
- 63.00 Bottom of hollow, 30 ft.below ridge, course N. $10^{\circ}W.$
- Asc.
- 70.00 Top of spur, 70 ft.above hollow, bears N. and S.
- Desc.
- 75.00 Bottom of swale, 30 ft.below spur, course N. $10^{\circ}E.$
- Asc.
- 91.30 Intersect N. and S. line, 17.62 chs. North of the SE.cor.of sec.3, heretofore described.
- Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for closing cor.of secs.2 and 10, (This will be the cor.for 2 and 10, after the line bet.secs.10 and 11 is run) mkd.on brass cap
- T 31 S R 4 W in N half.
- C. C. S 3 in W half;

Sub. T. 31. S., R. 4 W. - Continued.

Chains

S. 2 in NE.

S 10 in SW quadrant; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.

Land, mountainous and level.

Soil, sandy and gravelly loam; 2nd rate and rock, 3rd rate.

Subsoil, clay and rock.

Timber, cedar and pinon pine.

Undergrowth, sage and rabbit brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth.

91.50 chs.

July 11, 1911: At this cor. I set off $22^{\circ}12'N.$, on the decl.
arc; and at 0 h 5 m p.m., l.m.t., I observe the sun on the
meridian, the resulting lat. is $38^{\circ}09'N.$, which is the
proper lat. nearly.

From the cor. of secs. 10, 11, 14, and 15.

I run

N. $0^{\circ}01'W.$, on a true line bet. secs. 10 and 11.

Over mountainous land; through dense sage brush.

14.50 Wash, 12 lks. wide, 3 ft. deep, course S. $80^{\circ}E.$

Leave valley and ascend through timber.

19.00 Wood road, bears N. $70^{\circ}W.$ and S. $70^{\circ}E.$

33.00 Top of spur, 60 ft. above valley, bears E. and W.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 10 in W half
and S 11 in E half; from which

A cedar, 6 ins. dia., bears S. $40^{\circ}E.$, 120 lks.

dist. mkd. $\frac{1}{4}$ S 11 E T.

A pinon pine, 5 ins. dia., bears S. $32^{\circ}30'W.$, 105 lks.

dist. mkd. $\frac{1}{4}$ S 10 E T.

42.50 Bottom of hollow, 65 ft. below ridge, course S. $60^{\circ}E.$

Asc.

55.00 Top of ridge, 100 ft. above hollow, bears N. $70^{\circ}W.$ and S. $70^{\circ}E.$

Sub.T.31 S.,R.4 W.-Continued.

Chains

- 72.00 Bottom of hollow, 30 ft. below ridge, course S.65°E.
Asc.
- 75.50 Top of spur, 40 ft. above hollow, bears N.80°W. and S.80°E.
Desc.
- 80.00 Intersect E. and W. line, 11.30 chs. East of the closing
cor. of secs. 2 and 10,
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
ground, for closing cor. of secs. 10 and 11, mkd. on brass
cap
S 2 C C T 31 S R 4 W. in N. half
S 11 in SE.; and
S 10 in SW. quadrants; and raise a mound of stone,
2 ft. base, 1½ ft. high, S. of cor.
Land, mountainous and level.
Soil, sandy and gravelly loam; 2nd rate. 2 ft. deep. subsoil,
clay and gravel.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth,
80.00 chs.

July 11, 1911:

Dwight Stewart

U.S. Transitman

July 11, 1911 at 3 h 5 m p.m., l.m.t., I set off 38°04'N., on
the lat. arc; 22°11'N., on the decl. arc; and determine a
meridian with the solar, at the cor. of secs. 3, 4, 33, and
34, on S. bdy. of Tp, heretofore described.

Thence I run

N.0°02'W.; bet. secs. 33 and 34.

Over mountainous land; through heavy timber and dense
undergrowth.

Sub.T.31 S.,R.4 W.-Continued.

Chains

- 1.00 Bottom of hollow, 10 ft. below cor., course SW.
Asc.
- 6.00 Top of ridge, 100 ft. above hollow; bears N. 80° E. and S. 80° W.
Desc.
- 10.00 Leave timber, bears E. and W.
- 16.00 Bottom of hollow, 40 ft. below ridge, course N. 80° W.
Asc.
- 22.00 Top of ridge, 60 ft. above hollow, bears N. 70° E. and S. 70° W.
Desc.
- 32.20 Bottom of hollow, 40 ft. below ridge, course W.
Asc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 33 in W half and S 34 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 45.00 Top of ridge, 50 ft. above hollow, bears N. 80° E. and S. 80° W.
Desc.
- 62.50 Bottom of hollow, 60 ft. below ridge, course S. 60° E.
Asc.
- 72.50 Top of ridge, 30 ft. above hollow, bears N. 80° E. and S. 80° W.
Desc.
- 80.00 Set an iron post, 3 ft. long, 24 ins. in the ground, 2 ins. dia., for cor. of secs. 27, 28, 33, and 34, mkd. on brass cap
T 31 S. S. 28 in NW.
R 4 W S 27 in NE.
S 34 in SE.; and
S 33 in SW. quadrants; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Land, mountainous
- Soil, sandy and gravelly; 2nd rate. 2 ft. deep.
- Timber, cedar and pinn pine.
- Undergrowth, sage brush.
- Good grass
- Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 11, 1911.

Subl T. 31 S., R. 4 W. - Continued.

Chains

July 12, 1911: At 7 h. 5 m a.m., l.m.t., I set off $38^{\circ}05'N.$, on the lat. arc; $28^{\circ}07'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 27, 28, 33, and 34.

Thence I run

East, on a random line bet. secs. 27 and 34.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.14 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 26, 27, 34 and 35.

Thence I run

$S. 89^{\circ}57'W.$, on a true line bet. secs. 27 and 34.

Over mountainous land; through scattering timber and dense undergrowth.

Asc. gradually.

30.80 Top of spur, 100 ft. above cor., bears N. and S.

Asc. gradually across head of hollow.

38.00 Bottom of hollow, 20 ft. above spur, course $N. 10^{\circ}E.$

Asc.

40.07 Set an iron post, 3 ft. long, 1 in. in dia., 2 ins. in the ground, on rock, and surrounded by mound of stone, for

$\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 27 in N half and S 34 in S. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft.

high, N. of cor.

43.50 Top of spur, 60 ft. above hollow, bears NE and SW.

Ascend

74.00 Top of ridge, 100 ft. above last spur, bears $N. 30^{\circ}W.$ and $S. 30^{\circ}$

E..

Desc.

80.14 The cor. of secs. 27, 28, 33, and 34.

Land, mountainous .

Soil, red. sand and rocky about 12 ins. deep.

Timber, cedar and pinon pine.

Undergrowth, sage and rabbit brush.

Good grass :

Mountainous land, or, land covered with dense undergrowth,

Sub.T.31 S.,R.4 W.-Continued.

Chains

- 80.14 chs.
- July 12, 1911. At the noon hour the sky is overcast and solar observations are impossible.
- N.0°02'W., bet. secs. 27 and 28.
- Over mountainous land; through scattering timber and dense sage brush.
- Desc.
- 3.00 Bottom of hollow, 80 ft. below ridge, course N.40°E.
- Asc.
- 9.00 Top of spur, 60 ft. above hollow, bears E. and W.
- Desc.
- 12.00 Bottom of hollow, 75 ft. below spur, course S.30°E.
- Asc.
- 25.00 Top of ridge, 100 ft. above hollow, bears N.70°W. and S.70°E.
- Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 28 in W half and S 27 in E half; from which
- A pinon pine, 10 ins. dia., bears N.10°E., 79 lks. dist. mkd. $\frac{1}{4}$ S 27 B T.
- A cedar, 10 ins. dia., bears N.44°30'W., 67 lks. dist. mkd. $\frac{1}{4}$ S 28 B T.
- 49.00 Bottom of hollow, 300 ft. below ridge, course N.0°00'E.
- Asc.
- 58.00 Top of ridge, 300 ft. above hollow, bears E. and W.
- Desc.
- 71.00 Bottom of hollow, 200 ft. below ridge, course S.80°E.
- Asc.
- 77.00 Top of ridge, 230 ft. above hollow, bears N.75°W. and S.75°E.
- Desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 21, 22, 27, and 28, mkd. on brass cap

Chains

T 31 S S 21 in NW.

R 4 W S 22 in NE.

S 27 in SE ;and

S 28 in SW quadrants;from which

A pinon pine,6 ins.dia.,bears N.83°E.,12 lks.
dist..mkd.T 31 S R 4 W S 22 B T.

A cedar,6 ins.dia.,bears S.7°E.,36 lks.
dist..mkd.T 31 S R 4 W S 27 B T.

A pinon pine,10 ins.dia.,bears S.2°W.,40 lks.
dist.;mkd.T.31 S.R.4 W.S.28 B T.

A pinon pine,9 ins.dia.,bears N.30°W.,42 lks.
dist..mkd.T 31 S R 4 W S 21 B T.

Land,mountainous

Soil,red sand and rocky;about.12 ins.deep.subsoil,rock.

Timber cedar and pinon pine.

Undergrowth,sage brush.

Good grass.

Mountainous land,or land covered with dense undergrowth,
80.00 chs.

July 12,1911.

July 13,1911:At 7 h 5 m a.m.,l.m.t.,I set,off 38°07'N.,on
the lat.arc;21°58'N.,on the decl.arc;and determine a
meridian with the solar,at the cor.of secs.21,22,27,
and 28.

Thence I run

N.89°57'E.,on a random line bet.secs.22 and 27.

40.00 Set temp.½ sec.cor.

80.00 Intersect N.and S.line,7 lks.N.of the cor.of secs.22,23,
26,and 27.

Thence I run

West,on a true line bet.secs.22 and 27.

Over mountainous land;through heavy timber and scattering
undergrowth.

Desc.

6.00 Bottom of hollow,100 ft.below cor.;course NE.

Sub.T.31 S.,R.4 W.-Continued.

Chains

Asc.

14.00 Top of ridge, 80 ft. above hollow, bears N. and S.

Desc.

25.00 Bottom of hollow, 80 ft. below ridge, course N. 10° E.

Asc.

25.60 Wood road, bears N. 10° E. and S. 10° W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 22 in N half and S 27 in S. half; from which

A pinon pine, 4 ins. dia., bears N. 20° E., 30 lks.

dist. mkd. $\frac{1}{4}$ S 22 B T.

A cedar, 4 ins. dia., bears S. 40° E., 20 lks.

dist. mkd. $\frac{1}{4}$ S 27 B T.

49.50 Top of ridge, 40 ft. above hollow, bears N. 30° E. and S. 30° W.

Desc.

59.00 Bottom of hollow, 60 ft. below ridge, course NE.

Asc.

60.00 Wood road, bears NE and SW.

80.00 The cor. of secs. 21, 22, 27, and 28.

Land, mountainous.

Soil, sandy and gravelly; 2nd rate. about 18 ins. deep.

Timber, cedar, and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

July 13, 1911: At this cor. I set off $21^{\circ}56'N.$, on the decl. arc; and at 0 h 5 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}07'N.$, which is the proper lat. nearly.

N. 0° 02' W., bet. secs. 21 and 22.

Over mountainous land; through heavy timber and scattering sage brush.

Desc.

5.00 Wood road, bears E. and W.

Sub. T. 31 S., R. 4 W. -Continued.

Chains

- 7.00 Wood road, bears N. 70° E. and S. 70° W.
- 9.70 Bottom of hollow, 80 ft. below cor., course N. 60° E.
Asc.
- 23.00 Top of ridge, 60 ft. above hollow, bears E. and W.
Desc.
- 26.00 Bottom of hollow, 20 ft. below ridge, course S. 70° E.
Asc.
- 38.00 Top of ridge, 110 ft. above hollow, bears E. and W.
Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 21 in W half and S 22 in E half; from which
A pinon pine, 4 ins. dia., bears S. 80° E., 12 lks. dist. mkd. $\frac{1}{4}$ S 22 B T.
A cedar, 5 ins. dia., bears N. 10° W., 125 lks. dist. mkd. $\frac{1}{4}$ S 21 B T.
- 43.00 Bottom of hollow, 30 ft. below ridge, course E.
Asc.
- 46.00 Top of ridge, 90 ft. above hollow, bears N. 15° E. and S. 15° W.
Desc.
- 47.00 Head of hollow, 10 ft. below ridge, course N. 60° W.
Asc.
- 60.00 Top of ridge, 150 ft. above hollow, bears N. 70° W. and S. 70° E.
Desc.
- 71.00 Head of hollow, 60 ft. below ridge, course SW.
Asc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 15, 16, 21, and 22, mkd. on brass cap.
T 31 S S 16 in NW.
R 4 W S 15 in NE.
S 22 in SE.; and
S 21 in SW. quadrants; from which
A pinon pine, 16 ins. dia., bears N. 55° E., 56 lks. dist. mkd. T 31 S R 4 W S 15 B T.

Sub.T.31 S.,R.4 W.-Continued.

Chains

A pinon pine, 5 ins. dia., bears S. 5° E., 30 lks.
dist..mkd. T 31 S R 4 W S 22 B T.

A pinon pine 6 ins. dia., bears S. 8° W., 33 lks.
dist..mkd. T 31 S R 4 W S 21 B T.

A pinon pine, 12 ins. dia., bears N. 75° W., 45 lks.
dist..mkd. T 31 S R 4 W S 16 B T.

Land, mountainous .

Soil, sandy and rocky; 2nd and 4th rate. about 18 ins. deep.
Subsoil, gravel and rock.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

July 13, 1911.

July 14, 1911: At 7 h 6 m a.m., l.m.t., I set off 38° 08' N.,
on the lat. arc; 21° 50' N., on the decl. arc; and determine a
meridian with the solar, at the cor. of secs. 15, 16, 21, and
22.

Thence I run

East, on a random line bet. secs. 15 and 22.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.00 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 14, 15,
22, and 23.

Thence I run

S. 89° 58' W., on a true line bet. secs. 15 and 22.

Over mountainous land; through scattering timber and
dense sage brush.

Asc.

6.00 Top of ridge, 30 ft. above cor., bears N. 80° E. and S. 80° W.

Desc.

16.00 Bottom of hollow, 30 ft. below ridge, course NE.

Asc.

34.50 Top of ridge, 30 ft. above hollow, bears N. 70° W. and S. 70° E.

Desc.

Sub.T.31 S.,R.4 W.-Continued.

Chains

- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 15 in N half and S 22 in S half; from which
- A pinon pine, 6 ins. dia., bears N. 50° 47' E., 48 lks.
 - dist. mkd. $\frac{1}{4}$ S 15 B T.
 - A pinon pine, 5 ins. dia., bears S. 15° W., 35 lks.
 - dist. mkd. $\frac{1}{4}$ S 22 B T.
- 50.00 Bottom of hollow, 40 ft. below ridge, course S. 80° E.
Asc.
- 71.00 Top of ridge, 100 ft. above hollow, bears N. 10° E. and S. 10° W.
Desc.
- 80.00 The cor. of secs. 15, 16, 21, and 22.
Land; mountainous
Soil; sandy and gravelly loam; 2nd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Mountainous land, or land covered with dense undergrowth,
80.00 chs.
July 14, 1911: At this cor. I set off 21° 47' N., on the decl. arc; and at 0 h 5 m p.m., o.l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 08' N., which is the proper lat. nearly.
- N. 0° 02' W., on a true line bet. secs. 15 and 16.
Over mountainous land; through heavy timber and scattering undergrowth.
Asse.
- 1.50 Top of ridge, 30 ft. above cor., bears N. 75° E. and S. 75° W.
Desc.
- 25.00 Bottom of hollow, 50 ft. below ridge, course N. 30° W.
Asc.
- 30.00 Top of ridge, 75 ft. above hollow, bears NE and SW.
Desc.
- 36.00 Bottom of hollow, 150 ft. below ridge, course N. 80° W.
Asc.

Sub.T.31 S.,R.4 W.-Continued.

Chains

- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap. $\frac{1}{4}$ S 16 in W half and S 15 in E half; from which
- A pinon pine, 10 ins. dia., bears N. 55° E., 10 lks.
dist. mkd. $\frac{1}{4}$ S 15 B T.
- A pinon pine, 8 ins. dia., bears S. 80° W., 30 lks.
dist. mkd. $\frac{1}{4}$ S 16 B T.
- 42.00 Top of ridge, 150 ft. above hollow, bears N. 80° W. and S. 80° E.
Desc.
- 50.00 Bottom of hollow, 75 ft. below ridge, course N. 60° W.
Asc.
- 55.00 Top of ridge, 100 ft. above hollow, bears N. 75° W. and S. 75° E.
Desc.
- 58.00 Bottom of hollow, 100 ft. below ridge, course N. 35° W., Asc.
- 71.00 Ridge, 200 ft. above hollow, bears N. 80° W. and S. 80° E. Desc.
- 80.00 Intersect E. and W. line, 11.37 chs. East of the closing cor. of secs. 10 and 16, heretofore described.
- Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for closing cor. of secs. 15 and 16, mkd. on brass cap
- C C S 10 in N. half.
T 31 S R 4 W in N. half.
S 15 in SE.; and
S 16 in SW. quadrants; from which
- A pinon pine, 10 ins. dia., bears S. 17° E., 34 lks.
dist. mkd. T 31 S R 4 W S 15 B T.
- A cedar, 6 ins. dia., bears S. 40° W., 53 lks.
dist. mkd. T 31 S R 4 W S 16 B T.

Land, mountainous .

Soil, gravelly and rocky; 3rd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.

July 14, 1911.

John Stewart
U.S. Transitman

Chains

July 12, 1911: At 7 h 5 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat.arc; $22^{\circ}07'N.$, on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 4, 5, 32, and 33 on S. bdy. of Tp. heretofore described.

Thence I run

$N.0^{\circ}03'W.$, bet. secs. 32 and 33.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

5.25 Bottom of hollow, 200 ft. below cor., course $S.80^{\circ}W.$

Asc.

15.00 Top of ridge, 210 ft. above hollow, bears $N.80^{\circ}E.$ and $S.80^{\circ}W.$

Desc.

35.00 Bottom of hollow, 300 ft. below ridge, course $N.60^{\circ}W.$

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 32 in W half and S 33 in E half; from which

A pinon pine, 6 ins. dia., bears $N.35^{\circ}E.$, 53 lks.
dist. mkd. $\frac{1}{2}$ S 33 B T.

A pinon pine, 8 ins. dia., bears $S.60^{\circ}W.$, 43 lks.
dist. mkd. $\frac{1}{2}$ S 32 B T.

57.00 Top of ridge, 200 ft. above hollow, bears $N.70^{\circ}W.$ and $S.70^{\circ}E.$

Desc.

68.50 Bottom of hollow, 75 ft. below ridge, course NW.

Asc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 28, 29, 32, and 33, mkd. on brass cap

T 31 S S 29 in NW.

R 4 W S 28 in NE.

S 33 in SE.; and

S 32 in SW. quadrants; from which

A cedar, 4 ins. dia., bears $N.45^{\circ}E.$, 20 lks.

dist. mkd. T 31 S R 4 W S 28 B T.

Sub.T.51 S.,R.4 W.-Continued.

- Chains
- A pinon pine, 4 ins. dia., bears S. 50° E., 40 lks.
dist. mkd. T 31 S R 4 W S 35 B T.
- A pinon pine, 15 ins. dia., bears S. 10° W., 71 lks.
dist. mkd. ~~xx~~ T 31 S R 4 W S 32 B T.
- A pinon pine, 15 ins. dia., bears N 35° W., 90 lks.
dist. mkd. T 31 S R 4 W S 29 B T.
- Land, mountainous.
- Soil, sandy and clay loam; 2nd rate. about 14 ins. deep.
- Timber, cedar and pinon pine.
- Undergrowth, sage brush.
- Good grass for grazing.
- Mountainous or heavily timbered land, 80.00 chs.
- July 12, 1911: At this cor. I set off 22° 04' N., on the decl. arc; and at 0 h 5 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 05' N. which is the proper lat. nearly.
- East, on a random line bet. sec's. 28 and 33.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 80.20 Intersect N. and S. line, 14 lks. S. of the cor. of secs. 27, 28, 33, and 34.
- Thence I run
- S. 89° 54' W., on a true line bet. secs. 28 and 33.
- Over mountainous land; through scattering timber and dense undergrowth.
- Desc.
- 2.40 Bottom of hollow, 40 ft. below cor., course NE.
- Asc.
- 34.00 Top of ridge, 150 ft. above hollow, bears NW and SE.
- Desc.
- 40.10 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 28 in N half and S 33 in E half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

Sub.T.31 S.,R.4 W.-Continued.

Chains	
46.00	Enter heavy timber, bears N. and S.
71.00	Bottom of hollow, 200 ft. below ridge, course NW.
	Desc. gradually.
77.00	Top of ridge, 30 ft. below hollow, bears NW and SE.
	Desc.
80.20	The cor. of secs. 28, 29, 32, and 33.
	Land, mountainous drains west.
	Soil, sandy and gravelly; 2nd rate about 2 ft. deep subsoil gravel and rock.
	Timber, cedar and pinon pine.
	Undergrowth, sage brush.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.20 chs.
	N. 0° 03' W., bet. secs. 28 and 29.
	Over mountainous land; through heavy timber and dense undergrowth.
	Asc.
2.00	Top of ridge, 50 ft. above hor., bears N. 80° W. and SE.
	Desc.
15.00	Bottom of hollow, 130 ft. below ridge, course N. 60° W.
	Asc.
21.00	Top of ridge, 150 ft. above hollow, bears N. 60° W. and S. 60° E.
	Desc.
38.00	Bottom of hollow, 150 ft. below ridge, course N. 70° W.
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 29 in W half and S 28 in E half; from which
	A cedar, 8 ins. dia., bears N. 35° E., 70 lks.
	dist. mkd. $\frac{1}{4}$ S 28 B T.
	A cedar, 7 ins. dia., bears S. 75° W., 35 lks.
	dist. mkd. $\frac{1}{4}$ S 29 B T.
55.50	Top of ridge, 140 ft. above hollow, bears N. 80° W. and S. 30° E.

Sub.T.31 S.,R.4.W.-Continued.

Chains

Desc.

68 80 Bottom of hollow, 120 ft. below ridge, course N.30°W.

Asc.

75.00 Top of ridge, 130 ft. above hollow, bears NW and SE.

Desc.

80.00 Point 150 ft. below ridge, .

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28, and 29, mkd. on brass cap

T 31 S S 20 in NW.

R 4 W S 21 in NE.

S 28 in SE.; and

S 29 in SW. quadrants; from which

A pinon pine, 4 ins. in dia., bears N.34°E., 30 lks. dist..mkd.T 31 S R 4 W S 21 B T.

A pinon pine, 5 ins. dia., bears S.50°E., 15 lks. dist..mkd.T 31 S R 4 W S 28 B T.

A pinon pine, 8 ins. dia., bears S.15°W., 56 lks. dist..mkd.T 31 S R 4 W S 29 B T.

A pinon pine, 4 ins. dia., bears N.80°W., 50 lks. dist..mkd.T 31 S R 4 W S 20 B T.

Land, mountainous .

Soil, sandy and rocky; 2nd and 4th rate. 2 ft. deep.

Subsoil, gravel and rock.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 12, 1911.

July 13, 1911: At 7 h 5 m a.m., l.m.t., I set off 38°07'N., on the lat. arc; 21°59'N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 20, 21, 28, and 29.

Thence I run

Chains

- N.89°54'E., on a random line bet.secs.21 and 28.
- 40.00 Set temp. $\frac{1}{2}$ ' sec.cor.
- 80.04 Intersect N.and S.line, 7 lks.N.of the cor.of secs.21,22, 27,and 28.
- Thence I run
S.89°57'W., on a true line bet.secs.21 and 28.
Over mountainous land though heavy timber and scattering undergrowth.
- Asc.
- 10.00 Top of ridge, 30 ft.above cor., bears N.10°E.and S.10°W.
Desc.
- 12.00 Bottom of hollow, 50 ft.below ridge, course N.15°E.
Asc.
- 26.00 Top of ridge, 350 ft.above hollow, bears N.10°W.and S.10°E.
Desc.
- 35.00 Bottom of hollow, 40 ft.below ridge, course N.
Asc.
- 40.02 Set an iron post, 5 ft.long, 1 in.in dia., 12 ins.in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 21 in N half and S 28 in S half; from which
- A cedar, 8 ins.dia., bears N.35°E., 28 lks.
dist..mkd. $\frac{1}{2}$ S 21 B.T.
- A cedar, 8 ins.dia., bears S.5°W., 21 lks.
dist..mkd. $\frac{1}{2}$ S 28 B.T.
- 41.00 Top of ridge, 150 ft.above hollow, bears NW.and SE.
Desc.
- 68.00 Bottom of hollow, 100 ft.below ridge, course N.70°W.
Asc.
- 80.04 The cor.of secs.20, 21, 28, and 29.
Land, mountainous.
Soil, sandy and rocky; 2nd and 3rd rate about 12 ins.deep.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass.
Mountainous or heavily timbered land, 80.04 chs.
July 13, 1911: At this cor. I set off 21°56'N., on the decl.

Sub. T. 31 S., R. 4 W. - Continued:

Chains

arc; and at 0. h 5 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}07'N.$, which is the proper lat. nearly.

N. $0^{\circ}03'W.$, bet. ~~secs.~~ 20 and 21

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

11.00 Bottom of hollow, 100 ft. below cor., course NE.

Asc.

15.00 Top of ridge, 40 ft. above hollow, bears NE and SW.

Desc.

19.50 Head of hollow, 50 ft. below ridge, course W.

Asc.

22.00 Top of ridge, 20 ft. above hollow, bears NW and SE.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 20 in W half and S 21 in E half; from which

A pinon pine, 12 ins. dia., bears $N. 85^{\circ}E.$, 52 lks. dist. mkd. $\frac{1}{4}$ S 21 B.T.

A pinon pine, 5 ins. dia., bears $N. 29^{\circ}W.$, 78 lks. dist. mkd. $\frac{1}{4}$ S 20 B.T.

43.00 Bottom of hollow, 40 ft. below ridge, course $N. 30^{\circ}E.$

Asc.

58.00 Top of ridge, 100 ft. above hollow, bears NE and SW.

Desc.

80.00 Bottom of hollow, 200 ft. below ridge, course NE.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 16, 17, 20, and 21, mkd. on brass cap

T 31 S S 17 in NW.

R 4 W S 16 in NE.

S 21 in SE.; and

S 20 in SW. quadrants; from which

A pinon pine, 10 ins. dia., bears $N. 45^{\circ}E.$, 15 lks.

Sub.T.31 S.,R.4 W.-Continued.

Chains

dist.mkd.T.31 S R.4 W S 16 B T.

A pinon pine, 10 ins. dia., bears S.19°E., 64 lks.

dist..mkd.T 31 S R 4 W S 21 B T.

A cedar, 8 ins. dia., bears S.62°W., 37 lks.

dist..mkd.T 31 S R 4 W S 20 B T.

A pinon pine, 4 ins. dia., bears N.32°30'W., 85 lks.

dist..mkd.T 31 S R 4 W S 17 B T.

Land, mountainous. rough.

Soil, red sandy and rocky; about 12 ins. deep.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass.

Mountainous or heavily timbered land, 80.00 chs.

July 13, 1911.

July 14, 1911: At 7 h. 6 m a.m., l.m.t., I set off 38°08'N., on the lat. arc; 21°50'N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 16, 17, 20, and 21.

Thence I run

N. 89°57'E., on a random line bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.02 Intersect N. and S. line, 2 lks. N. of the cor. of secs. 15, 16, 21, and 22.

Thence I run

S. 89°58'W. on a true line bet. secs. 16 and 21.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

20.00 Desc. over ledges, bears N. and S.

22.00 Foot of ledges, bears N. and S.

32.25 Bottom of hollow, 300 ft. below cor., course N.W.

Asc.

40.01 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 16 in N half and S

Chains

21 in S half; from which

A cedar, 4 ins. dia., bears N. 30° E., 10 lks.
dist. mkd. $\frac{1}{4}$ S 16 B T.

A pinon pine, 5 ins. dia., bears S. 45° E., 20 lks.
dist. mkd. $\frac{1}{4}$ S 21 B T.

43.80 Wood road, bears NW and SE.

45.00 Top of ridge 125 ft. above hollow, bears N. and S.

Desc.

60.00 Begin more abrupt descent, bears N. and S.

73.75 Bottom of hollow, 150 ft. below ridge, course N.

Asc.

77.00 Top of ridge, 40 ft. above hollow, bears N. and S.

Desc.

80.02 The cor. of secs. 16, 17, 20, and 21.

Land, mountainous, rough and rocky.

Soil, red sand and rocky about 1 ft. deep. subsoil rock.

Timber, cedar and pinon-pine.

Undergrowth, sage brush.

Good grass.

Mountainous or heavily timbered land, 80.02 chs.

July 14, 1911: At this cor. I set off 21° 47' N., on the decl. arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 08' N., which is the proper lat. nearly.

N. 0° 03' W., on a true line bet. secs. 16 and 17.

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

15.00 Top of ridge, 125 ft. above cor., bears NE and SW.

Desc.

30.00 Begin steeper descent over ledges, bears NE and SW.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor. on solid rock, and surrounded by mound of stone, mkd. on brass cap $\frac{1}{4}$ S 17 in W half and S 16 in E half; from which

Sub.T.31 S.,R.4 W.-Continued.

Chains

A pinon pine, 6 ins. dia., bears N.79°E., 12 lks.
dist..mkd. $\frac{1}{4}$ S 16 B T.

A pinon pine, 8 ins. dia., bears N.46°W., 67 lks.
dist..mkd. $\frac{1}{4}$ S 17 B T.

51.75 Bottom of hollow, 400 ft. below ridge, course N.20°W.

Asc.

62.60 Intersect E. and W. line, 11.50 chs. East of the cor. Of secs.
8 and 9, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the
ground, on solid rock, and surrounded by mound of stone,
for closing cor. of secs. 16 and 17, mkd. on brass cap.

T 31 S R 4 W C C S 8 S 9 in N half.

S 16 in SE.; and

S 17 in SW. quadrants; from which

A pinon pine, 7 ins. dia., bears S.65°E., 22 lks.

dist..mkd. T 31 S R 4 W S 16 B T.

A cedar, 20 ins. dia., bears S.24°W., 68 lks.

dist..mkd. T 31 S R 4 W S 17 B T.

Land, mountainous rough and ledgy.

Soil, gravelly and rocky about 1 ft. deep on rocky subsoil

Timber, cedar, pinon pine, and mahogany.

Undergrowth, sage brush.

Mountainous or heavily timbered land, 62.60 Chs.

July 14, 1911.

Douglas Stewart

U. S. Transitman.

July 15, 1911: At 7 h 6 m a.m., l.m.t., I set off 38°04'N.,
on the lat. arc; 21°41'N., on the decl. arc; and determine a
meridian with the solar, at the cor. of secs. 31 and 32, on
S. bdy. of Tp., heretofore described.

Thence I run

N. 0°03'W., bet. secs. 31 and 32.

Over mountainous land; through heavy timber and dense
undergrowth.

Desc.

Chains	
2.20	Bottom of hollow, 20 ft. below cor., course W. Asc.
8.60	Top of ridge, 150 ft. above hollow, bears E. and W. Desc.
14.00	Desc. abruptly over ledges, (conglomerate) bears E. and W.
36.00	Foot of ledge and descent, 400 ft. below ridge, bears NE and SW. Enter river bottom.
42	Leave timber, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 31 in W half and S 32 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
43.15	Right bank of Sevier river, bears NE and SW. bank 6 ft. high, river 3 ft. deep.
44.30	Left bank of river, bears same.
67.00	Left bank river, bears N. 10° W. and S. 10° E.
70.00	Right bank of river, bears same.
71.90	Right bank of river, bears NE and SW.
73.00	Left bank of river, bears same.
74.00	Left bank of river, bears NW and SE.
74.75	Left bank of river, bears NE and SW.
78.75	Left bank of Sevier river, bears N. 20° W. and S. 20° E.
80.00	Point for cor. falls in river therefore at
78.75	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for witness cor. to cor. of secs. 29, 30, 31, and 32, mkd. on brass cap T 31 S S 30 in NW. W C R 4 W S 29 in NE. S 32 in SE.; and S 31 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Thence I offset West 20 lks. and run on offset line N. 0° 03' W., 125 lks. making 80.00 chs. from south;
80.00	Left bank of Sevier river, bears N. and S., and 20 lks. W. of the cor. point.

Chains

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for witness cor. to cor. of secs. 29, 30, 31, and 32, mkd. on brass cap.

T 31 S S 30 in NW.

R 4 W S 29 W C in NE.

S 32 in SE. and

S 31 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land mountainous and river bottom.

Soil, sandy and clay loam in river bottom and gravelly on mountains.

Timber, cedar and pinon pine.

Undergrowth, sage brush on hills and willows, birch, and rose brush in river bottom.

Godd grass.

Mountainous or heavily timbered land or land covered with dense undergrowth, 80.00 chs.

July 15, 1911: At this cor. I set off $21^{\circ}38'N.$, on the decl. arc; and at 6 h 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}05'N.$, which is the proper lat. nearly.

From witness cor. which is 20 lks. west of cor. point I run East, on a random line bet. secs. 29 and 32.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.10 From cor. point, intersect N. and S. line, 5 lks. N. of the cor. of secs. 28, 29, 32, and 33.

Thence I run N. $89^{\circ}58'W.$, bet. secs. 29 and 32. on true line.

Over mountainous land; through heavy timber and dense undergrowth.

Desc.

24.25 Bottom of hollow, 200 ft. below sec. cor., course N. $75^{\circ}W.$

Asc.

40.05 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 29 in N half and S 32 in S half; from which

Sub.T.31 S.,R.4 W.-Continued.

Chains

A pinon pine, 5 ins. dia., bears N.10°E., 29 lks.
dist. mkd. $\frac{1}{2}$ S 29° E T.

A pinon pine, 8 ins. dia., bears S.5°E., 9 lks.
dist. mkd. $\frac{1}{4}$ S 32° E T.

42.00 Top of ridge, 150 ft. above hollow, bears N.75°W. and S.75°E.
Desc.

45.00 Desc. abruptly over ledges, bears N. and S.

75.00 Foot of descent, 550 ft. below ridge, bears N. and S.
Leave ledges and enter river bottom.

79.47 Right bank of Sevier river, bears N. and S.
Bank 6 ft. high, sandy bottom, water 3 ft. deep.

80.10 Left bank of river. True point for cor. secs. 29, 30, 31 and 32.

80.30 The witness cor. for cor. of secs. 29, 30, 31, and 32, which is 20 lks. west of cor. point.

Land, mountainous.

Soil, gravelly and sandy; rocky subsoil.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.10 chs.

West, on a random line bet. secs. 30 and 31, from the witness cor. to cor. of secs. 29, 30, 31, and 32, which is 20 lks. west of the cor. point. Distance counted from cor. point.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.50 Intersect W. bdy. of Tp., at the cor. of secs. 25, 30, 31, and 36, heretofore described.

Thence I run

East, on a true line bet. secs. 30 and 31.

Over mountainous land; through heavy timber.

Asc.

1.50 Top of ridge, 35 ft. above cor., bears N. and S.

Desc.

20.00 Bottom of hollow, 30 ft. below ridge, course N.10°E.

Asc.

Chains

- 37.00 Top of ridge, 133 ft. above hollow, bears N. 10° E. and S. 10° W.
Desc. over volcanic ledges.
- 37.50 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the
ground, on solid rock, and surrounded by mound of stone,
for 1/2 sec. cor. mkd. on brass cap 1/2 S 30 in N half
and S 31 in S half; from which
 - A pinon pine, 5 ins. dia., bears N. 40° E., 94 lks.
dist. mkd. 1/2 S 30 B T.
 - A pinon pine, 7 ins. dia., bears S. 30° E., 27 lks.
dist. mkd. 1/2 S 31 B T.
- 58.00 Ledge, 75 ft. high, bears NE and SW.
- 61.50 Gulch 30 ft. deep, course N. 40° E.
Asc.
- 63.00 Top of spur, 40 ft. above gulch, bears N. 20° E. and S. 20° W.
Desc.
- 71.02 Fall 48 lks. S. of the old cor. of secs. 29, 30, 31, and 32,
which is a granite stone, 16x10x8 ins., and which I destroy.
Foot of descent and leave ledges, bears N. and S.
Enter river bottom.
Leave timber, bears N. and S.
Enter dense sage and willows, bears N. and S.
- 74.40 Telephone line, Circleville to Ranguitch, bears N. and S.
- 74.90 County road, bears N. and S.
- 77.50 The point for cor. of secs. 29, 30, 31, and 32, which is 20 lks.
East of witness cor.
Land, mountainous.
Soil, sandy and gravelly and rocky; 2nd and 4th rate.
Timber, cedar and pinon pine.
Undergrowth, sage and willows.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered
with dense undergrowth, 77.50 chs.

July 15, 1911.

John Stewart

U.S. Transitman.

Chains

- July 15, 1911: At 7 h 6 m a.m.; l.m.t.; I set off $38^{\circ}05'N.$, on the lat. arc; $21^{\circ}41'N.$, on the decl. arc; and determine a meridian with the solar, at the witness cor. to cor. of secs. 29, 30, 31 and 32, which is 20 lks. West of the true cor. point.
- Thence I run
- $N. 0^{\circ}03'W.$, on an offset line bet. secs. 29 and 30.
- In river bottom. Dense willows and sage . . .
- .20 Offset E. 20 lks, to sec. line. on left bank of river.
- 9.75 Left bank of river, bears $N. 80^{\circ}W.$ and $S. 80^{\circ}E.$
- 10.65 Right bank of river, 6 ft. high, bears $N. 80^{\circ}W.$ and $S. 80^{\circ}E.$
- 25.50 Right bank of river, ware. 4 ft. deep, bears NE and SW.
- 26.35 Left bank of river, bears NE and SW.
- 29.90 Left bank of river, bears $N. 20^{\circ}W.$ and $S. 20^{\circ}E.$
- 30.85 Right bank of river, bears $N. 20^{\circ}W.$ and $S. 20^{\circ}E.$
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 30 in W half and S 29 in E half; dig pits, 18x18x12 ins., N. and S. of post 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 41.50 Right bank of river, 8 ft. high, bears $N. 20^{\circ}E.$ and $S. 20^{\circ}W.$
- 45.00 Left bank of river, bears $N. 20^{\circ}E.$ and $S. 20^{\circ}W.$
- 48.00 County road, bears NE and SW.
- 48.20 Telephone line „Circleville to Panguitch, bears NE and SW.
Asc. side of mountain.
- 76.50 Top of spur, 60 ft. above river bottom, bears $N. 80^{\circ}W.$ and $S. 80^{\circ}E.$
E.
Desc.
- 77.75 Bottom of hollow, 35 ft. below spur, course $S. 80^{\circ}E.$
Asc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 19, 20, 29, and 30, mkd. on brass cap
T 31 S S 19 in NW.
R 4 W S 20 in NE.
S 29 in SE; and

Chains

S 30 in SW quadrants; and raise a mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, river bottom and side hill.

Timber, a few scattering cottonwoods along the river bottom.

Soil, in river bottom rich sandy loam; 1st rate. on hill
sides, soil gravelly.

Undergrowth, willows and sage brush.

Good grass.

Mountainous land or land covered with dense undergrowth,
80.00 chs.

July 15, 1911: At this cor. I set off $21^{\circ}38'N.$, on the decl.
arc; and at 0 h 6 m p m ., l. m. t., I observe the sun on the
meridian, the resulting lat. is $38^{\circ}06'N.$, which is the
proper lat. nearly.

S. $89^{\circ}58'E.$, on a random line bet. secs. 20 and 29.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 intersect N. and S. line, at the cor. of secs. 20, 21, 28, and
29.

Thence I run

N. $89^{\circ}58'W.$, on a true ^{line} bet. secs. 20 and 29.

Over mountainous land; through scattering timber and
dense undergrowth.

Desc.

7.00 Bottom of hollow, 20 ft. below, course N. $30^{\circ}W.$

Asc.

10.00 Top of ridge, 40 ft. above hollow, bears NW and SE.

Desc.

13.00 Begin abrupt descent over ledges, bears NW and SE.

19.90 Bottom of hollow, 200 ft. below ridge, course N. $15^{\circ}W.$

Asc. over ledges.

30;00 Top of ridge, 150 ft. above hollow, bears N. $30^{\circ}W.$ and S. $30^{\circ}E.$

Desc. abruptly over ledges.

37.00 Begin more abrupt descent, bears N. $30^{\circ}W.$ and S. $30^{\circ}E.$

39.99 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the
ground, on solid rock, and surrounded by mound of stone,

Chains

for $\frac{1}{4}$ sec.cor.,mkd.on brass cap $\frac{1}{4}$ S 20 in N half and S 29 in S half;from which.

A pinon pine,12 ins.dia.,bears N.16°W.,68 lks.

dist..mkd. $\frac{1}{4}$ S 20 B T.

A cedar,6 ins.dia.,bears S.20°E.,18 lks.

dist..mkd. $\frac{1}{4}$ S 29 B T.

66.40 Foot of ledges and descent,bears N.10°E.and S.10°W.
1200 ft.below ridge.

Leave timber,bears N.10°E.and S.10°W.

Enter Sevier river bottom.

67.40 Right bank of Sevier river,7 ft.high,bears N.10°E.and S.10°W.

68.50 Left bank of river,bears N.10°E.and S.10°W.

70.10 Telephone line Circleville to Panguitch,bears N.10°E.and S.10°W.Leave river bottom and ascend.

71.25 County road,bears N.10°E.and S.10°W.

79.98 The cor.of secs.19,20,29,and 30.

and,mountainous

Soil,sandy and gravelly and rocky;2nd and 4th rate.

Timber,cedar and pinon pine.

Undergrowth,sage brush.

Good grass

Mountainous land or dense undergrowth 79.98 chs.

July 15,1911.

July 17,1911:At 7 h 6 m a.m.,l.m.t.,I set off 38°06'N.,on the lat.arc;21°22'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.19,20,29, and 30.

West,on a random line bet.secs.19 and 30.

40.00 Set temp. $\frac{1}{4}$ sec.cor.

77.32 Intersect W.bdy.of Tp.,10 lks.N.of the cor.of secs.19,24,25,and 30, heretofore described.

Thence I run

N:89°56'E.;on a true line bet.secs.19 and 30.

Over mountainous land;through dense sage brush.

Sub.T.31 S.,R.4 W.-Continued.

Chains

Desc.

11.50 Bottom of hollow, 50 ft. below cor., course N.10°W.

Asc.

14.00 Enter heavy timber, bears N. and S.

37.32 Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 19 in N half and S 30 in S. half; from which

A pinon pine, 5 ins. dia., bears N.4°E., 227 lks.
dist. mkd. $\frac{1}{4}$ S 19 B T.

A pinon pine, 6 ins. dia., bears S.78°W., 14 lks.
dist. mkd. $\frac{1}{4}$ S 30 B T.

39.00 Top of ridge, 400 ft. above hollow, bears N.15°E. and S.15°W.

Desc.

51.00 Begin steeper descent over ledges, bears N. and S.

57.50 Bottom of hollow, 175 ft. below ridge, course S.60°E.

Asc.

60.00 Top of ridge, 85 ft. above hollow bears N.50°W. and S.50°E.

Desc.

65.00 Bottom of hollow, 70 ft. below ridge, course SE.

Asc.

67.00 Top of ridge, 60 ft. above hollow, bears NW and SE.

Desc.

77.32 The cor. of secs. 19, 20, 29, and 30.

Land, mountainous, very rough.

Soil, gravelly and rocky; 2nd and 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 77.32 chs.

July 17, 1911.

July 18, 1911: At 7 h 6 m a.m., l.m.t., I set off 38°07'N.,

Chains

on the lat.arc;21°12'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.19,20,29,and 30.

Thence I run N.0°05'W.,bet.secs.19 and 20..

Over mountainous land;through scattering timber and s cattering undergrowth.

Asc.over ledges.

10.00 Top of ridge,150 ft.above cor.,bears E.and W.

Desc.over ledges.

12.50 Bbttom of hollow,30 ft.below ridge,course S.75°E.

Asc.

34.00 Top of ridge,450 ft.above hollow,bears N.80°E.and S.80°W.

Desc.

40.00 Set an iron post,3 ft.long,1 in.in dia.,16 ins.in the ground,on solid rock,and surrounded by mound of stone, for 1/2 sec.cor.mkd.on brass cap 1/4 S 19 in W half and S 20 in E half;and raise a mound of stone,2 ft.base,1 1/2 ft. high,W.of cor.

42.40 Bottom of hollow,100 ft.below ridge,course N.35°E.

Asc.

42.90 Top of sharp ridge,40 ft.above hollow,bears E.and W.

Desc.

43.50 Bottom of hollow,50 ft.below ridge,course N.90°E.

Asc.

44.00 Top of ridge,40 ft.above hollow,bears E.and W.

Desc.

53.00 Bottom of hollow,500 ft.below ridge,course N.90°E.

Asc.over ledges.

57.50 Leave ledges,bears E.and W.

65.00 Top of ridge,500 ft.above hollow,bears NE and SW.

Desc.

73.00 Bottom of hollow,200 ft.below ridge,course N.40°E.

Asc.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,14 ins.in the ground,on solid rock,and surrounded by mound of stone, for cor.of secs.17,18,19,and 20,mkd.on brass cap

Chains

T 31 S S 18 in NW.

R 4 W S 17 in NE.

S 20 in SE.;and

S 19 in SW.quadrants;and raise a mound of stone,
2 ft.base,1½ ft.high,W.of cor.

Land,mountainous .

Soil,gravelly and rocky;1 to 2 ft.deep.subsoil,gravel and
rock.

Timber,cedar and pinon pine.

Undergrowth,sage brush.

Good grass.

Mountainous land,80.00 chs.

July 18,1911:At the noon hour the sky is overcast and
solar observations are impossible.

S:89°58'E.,on a random line bet.secs.17 and 20.

40.00 Set temp.¼ sec.cor.

79.90 Intersect N.and S.line,5 lks.S.of the cor.of secs.16,17,
20,and 21,random

Thence I run

West, on a true line bet.secs.17 and 20.

Over mountainous land;through heavy timber and scattering
undergrowth..

Asc..

13.50 Top of ridge,200 ft.above cor.,bears N.and S.

Desc.

23.50 Bottom of hollow,150 ft.below ridge,course N.

Asc. Leave timber,bears N.and S.

39.95 Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the
ground,on solid rock,and surrounded by mound of stone,
for ¼ sec.cor..mkd.on brass cap ¼ S 17 in N half and
S 20 in S half;and raise a mound of stone,2 ft.base,1½
ft.high,N.of cor.

47.75 Top of ridge,200 ft.above hollow,bears N.and S.

Desc.

53.00 Top of serices of volcanic ledges,350 ft.high,bears N.
and S.

Chains

- 64.00 Foot of descent, 100 ft. below top, leave ledges, bears N. and S.
Enter Sevier river bottom.
- 66.00 Right bank of Sevier river, 5 ft. high, water, 3 ft. deep. bears N. and S.
- 66.60 Left bank of river.
- 66.75 County road, bears N. and S. Asc. mountain.
- 70.00 Telephone line, Circleville to Panguitch, bears N. and S.
- 79.90 The cor. of secs. 17, 18, 19, and 20.
Land, mountainous very rough.
Soil, sandy in river bottom, rocky on mountains about 12 ins. deep.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass.
Mountainous or heavily timbered land, 79.90 chs.
- July 18, 1911.
- July 19, 1911: At 7 h 6 m a.m., l.m.t., I set off $38^{\circ}07'N.$ on the lat. arc; $21^{\circ}01'N.$, on the decl. arc; and determine meridian with the solar, at the cor. of secs. 17, 18, 19, and 20.
- Thence I run
 $S.89^{\circ}56'W.$, on a random line bet. secs. 18 and 19.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 77.78 Intersect W. bdy. of Tr., at the cor. of secs. 13, 18, 19, and 24, heretofore described.
Thence I run
 $N.89^{\circ}56'E.$, on a true line bet. secs. 18 and 19.
Over mountainous land; through scattering timber and scattering undergrowth.
- Asc.
- 4.30 Top of ridge, 50 ft. above cor., bears $N.15^{\circ}E.$ and $S.15^{\circ}W.$
Desc.

Chains

- 16.30 Bottom of hollow, 150 ft. below ridge, course N.15°E.
Asc.
- 37.38 Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 18 in N. half and S 19 in S half; from which
A pinon pine, 4 ins. dia., bears N.87°W., 75 lks. dist. mkd. $\frac{1}{4}$ S 18 B T.
A pinon pine, 4 ins. dia., bears S.5°E., 35 lks. dist. mkd. $\frac{1}{4}$ S 19 B T.
- 42.30 Top of ridge, 150 ft. above hollow, bears N.5°E., and S.5°W.
Desc.
- 54.30 Bottom of hollow, 200 ft. below ridge, course N.5°E.
Asc.
- 58.80 Top of ridge, 100 ft. above hollow, bears N.10°E. and S.10°W.
Desc.
- 72.30 Leave timber, bears N. and S.
- 77.38 The cor. of secs. 17, 18, 19, and 20.
Land, mountainous.
Soil, sandy and rocky; 2nd and 4th rate about 14 ins. deep
Subsoil, gravel and rock.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, 77.38 chs.
July 19, 1911: At this cor. I set off 20°58'N., on the decl. arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°07'N., which is the proper lat. nearly.
-
- N.0°03'W., on a true line bet. secs. 17 and 18.
Over mountainous land; through scattering timber and scattering undergrowth. Asc. over ledges.
- 5.00 Top of ridge, 200 ft. above cor., bears E. and W.
Desc.

Sub.T.31 S.,R.4 W.-Continued.

Chains

- 25.00 Begin more abrupt descent over ledges, bears E. and W.
- 28.10 Bottom of canon, 400 ft. below ridge, course E.
Asc. abruptly over ledges.
- 40.00 Top of ridge, 150 ft. above canon, bears E. and W.
Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 18 in W half and S 17 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
Desc. over ledges.
- 43.00 Bottom of ravine 150 ft. below spur, course S. 60° E.
Asc. over ledges.
- 56.00 Top of ridge, 350 ft. above hollow, bears E. and W.
Desc. over ledges.
- 62.51 Intersect E. and W. line, 11.22 chs. East of the cor. of secs. 7 and 8, heretofore described.
Set an iron post, 3 ft. long, 2 ins. dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for closing cor. of secs. 17 and 18, mkd. on brass cap
C C T 31 S R 4 W S 7 S 8 in N half.
S 17 in SE.; and
S 18 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.
- Land, mountainous.
Soil, rocky; 13rd rate.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Good grass.
Mountainous land, 62.51 chs.
- July 19, 1911
- Note:- No trace of the old subdivision cor. in the southern part of the Tp, where we were instructed to destroy them was found.
- Gauley Stewart*
U.S. Transitman.

Chains

GENERAL DESCRIPTION.

This township is very rough and mountainous with the exception of the northeast cor. which is a level and fertile valley. The soil in the northeast cor of the township is a rich sandy and clay loam from 2 to 4 ft. deep, on a subsoil of clay. The soil of the mountainous part of the township is a sandy or gravelly loam mixed with a good deal of rock, and with an average depth of about 15 ins.; and the subsoil is generally solid rock. With the exception of the valley land the entire township is covered with a heavy growth of cedar and pinon pine timber. There are a few cottonwood trees scattered along the Sevier river. The undergrowth is principally sage brush with some patches of rabbit brush and oak. Also considerable willows, birch, and wild rose along Sevier river.

The Sevier river crosses the township from South to north. It has an average width of about 1.50 chs. and an average depth of water of about 2 ft. Throughout this township the river bottom is usually gravelly or rocky. There are a number of other small streams in the township which are so located as to furnish abundant water for cattle and sheep grazing in the township.

Mr. Robinson has a house and cultivated land in sec. 31, and some fencing; the house not seen from line, value of improvements about \$500.00.

Mr. Parker has a house and cultivated land, and fences in secs. 3 and 4, value of improvements about \$2,000.00. There is a house and cultivated land in sec. 4, house not seen from line and claimant unknown. Value of improvements about \$800.00.

William D. Lewis has about 2 miles of fencing and considerable cultivated land on his Desert Entry in sec. 2, Value of improvements about \$2,000.00.

Ellis Chamberlain has a camp and is ploughing land in

Chains

sec.11.value of improvements about \$30.00.

Loren Fullmer has a house,ploughed land and other improvements in sec.11,valued at about \$100.00 .

Mr. Mr.Monson has a house and some cultivated land in sec.3,value about \$100.00 .

Telephone line from Circleville to Panguitch traverses this township from north to south.

There is no mineral in this township.

John R Stewart
Quincy Stewart
U.S. Transitmen.

July 19,1911.

FINAL OATH OF UNITED STATES SURVEYOR

I, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for bearing date of the day of 1911, I have well, faithfully, and in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of

For final oath of Transition see book "P" 7.32 G., R. G. P.

of the Meridian, in the State of which are represented the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey.

U. S. Surveyor

Subscribed by said and sworn to before me this day of 1911



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL

Salt Lake City, Utah, June 18, 1911

The foregoing field notes of the survey of the subdivisional lines of Township No. 31 South, Range No. 4 West of the Salt Lake Base and Meridian, Utah

executed by John R. Stewart and Quinby Stewart under his special instructions dated March 27, 1911, having been critically examined, and the necessary corrections and explanations made the said field notes, and surveys they describe, are hereby approved.

[Signature] U. S. Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in has been correctly copied from the original notes on file in this office

[Signature]

U. S. Surveyor General

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INDEX DIAGRAM.

Township _____, Range _____

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31	32	33	34	35	36

South bay T. 31 S., R. 3 W.

Survey commenced July 16, 1911, and executed with a W. and L. E. Gurley Explorer's transit No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct and was approved by the surveyor general for Utah, on Mar. 29, 1911.

I examine the adjustments of the instrument and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observations, I proceed as follows:

At the cor. of Tps. 31 and 32 S., Rs. 3 and 4 W., latitude $38^{\circ}04'17''$ N., longitude $112^{\circ}13'30''$ W., I set off $38^{\circ}04'$ N., on the lat. arc; $23^{\circ}27'$ N., on the decl. arc; and at 4 h 6 m p.m., l.m.t., I determine a meridian with the solar and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 11 h 56.3 m p.m., l.m.t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point thereof on a stone firmly set in the ground, 5.00 chs. N. of the cor.

July 16, 1911.

July 17, 1911: At 6 h 30 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29'16''$ to the W. and mark a point in the meridian thus determined, by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.39 ins. east of the meridian established by the solar.

At 7 h 6 m a.m., l.m.t., I set off $38^{\circ}04'$ N., on the lat. arc; $21^{\circ}22'$ N., on the decl. arc; and determine a meridian with the solar, and mark a point thereof by a cross on the

S.bdy.T.31 S.,R.3 W.-Continued.

Chains

stone already set 5.00 chs. N. of the cor.; this mark falls 0.58 ins. east of the meridian established by Polaris observation.

The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about 0'21" west and 0'20" east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 0 m a.m., is N. 16°13' W., the angle thus determined gives the mag. declination 16°13' E.

From the cor. of Tps. 31 and 32 S., Rs. 3 and 4 W.,
Heretofore described.

I run

East on a true line bet. secs. 6 and 31.

Over mountainous land; through heavy timber and dense undergrowth.

Desc.

7.00 Bottom of hollow, 250 ft. below cor., course NW.

Asc.

17.00 Top of ridge 250 ft. above hollow, bears NW and SE.

Leave heavy and enter scattering timber, bears NW. and SE.

Desc.

30.00 Bottom of hollow, 200 ft. below ridge, course NW.

Enter heavy timber.

Asc.

37.74 Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 31 in N half and S 6 in S half; from which

A pinon pine, 8 ins. dia., bears N. 65° E., 29 lks.

dist. mkd. $\frac{1}{4}$ S 31 B T.

A cedar, 8 ins. dia., bears S. 15° E., 66 lks.

S. bdy. T. 31 S., R. 30 W. -Continued:

Chains

dist. mkd. S 6 B T. ✓

40.00 Top of ridge, 250 ft. above hollow, bears NW and SE.

Desc.

71.00 Creek, 4 lks. wide, 3 ins. deep, (Lost Creek), in bottom of
ednon, 700 ft. below ridge, course $61.80^{\circ}W$.

Asc. abruptly over ledges.

77.74 Set an iron post, 5 ft. long, 3 ins. in dia., 18 ins. in the
ground, on solid rock, and surrounded by mound of stone,
for cor. of secs. 5, 6, 31, and 32, mkd. on brass cap

T 31 S S 31 in NW. ✓

R 3 W S 32 in NE. ✓

R 5 W S 5 in SE.; and

T 32 S S 6 in SE. quadrants; from which

A mahogany 8, ins. dia., bears $N. 36^{\circ} 30' E.$, 25 lks.
dist. mkd. T 31 S R 3 W S 32 B T. ✓A cedar, 18 ins. dia., bears $S. 42^{\circ} 30' E.$, 88 lks.
dist. mkd. T 32 S R 3 W S 5 B T. ✓A pinon pine, 10 ins. dia., bears $S. 49^{\circ} W.$, 35 lks.
dist. mkd. T 32 S R 3 W S 6 B T. ✓A mahogany 10 ins. dia., bears $N. 2^{\circ} W.$, 53 lks.

dist. mkd. T 31 S R 3 W S 31 B T. ✓

Land, mountainous north drainage.

Soil, red sand and rocky about 12 ins. deep, 3rd rate.

Subsoil, rock.

Timber, cedar and pinon pine, mahogany and pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 77.74 chs.July 17, 1911: at this cor. I set off $21^{\circ} 19' N.$, on the decl.

arc; and at 6 h 6 m p.m., l.m.t., I observe the sun

on the meridian the resulting lat. is $38^{\circ} 04' N.$, which is the
proper lat. nearly.

East, on a true line bet. secs. 5 and 32.

Over mountainous land; through heavy timber and scattering

S. bay. T. 31 S., R. 3 E. - Continued.

Chains

undergrowth.

Asc. abruptly.

30.00 Top of ridge, 1200 ft. above cor., bears NW. and SE.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 52 in N half and S 5 in S half; from which

A pinon pine, 4 ins. dia., bears N. 59° W., 20 lks. dist. mkd. $\frac{1}{2}$ S 52 B T.

A pinon pine, 4 ins. dia., bears 88° E., 55 lks. dist. mkd. $\frac{1}{2}$ S 5 B T.

42.20 Leave heavy and enter scattering timber, bears N. and S.

47.50 Bottom of hollow, 40 ft. below ridge, course N.

Asc.

50.65 Top of ridge, 100 ft. above hollow, bears N. and S.

Desc.

57.00 Bottom of hollow, 150 ft. below ridge, course N.

Asc.

60.00 Enter heavy timber, bears N. and S.

67.75 Top of ridge, 250 ft. above hollow, bears N. 20° W. and S. 20°

E.

Desc.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 4, 5, 32, and 33. mkd. on brass cap

✓ T 31 S S 32 in NW.

✓ R 3 W S 33 in NE.

✓ $\frac{1}{2}$ S W S 4 in SE.; and

✓ T 32 S S 5 in SW. quadrants; from which

A red pine, 4 ins. dia., bears N. 35° E., 16 lks.

dist. mkd. T 31 S R 3 W S 33 B T. ✓

A fir, 6 ins. dia., bears S. 27° E., 16 lks.

dist. mkd. T 32 S R 3 W S 4 B T. ✓

A fir, 10 ins. dia., bears S. 19° W., 19 lks.

dist. mkd. T 32 S R 3 W S 5 B T. ✓

A red pine, 6 ins. dia., bears N. 29° W., 5 lks.

dist. mkd. T 31 S R 3 W S 32 B T. ✓

Chains

Land, high steep mountains.

Soil, clay and rocky about 12 ins. deep. subsoil rocky.

Timber, fir, pine, cedar and pinon pine. mahogany.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 17, 1911.

July 18, 1911: At 7 h 6 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat. arc; $21^{\circ}12'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 4, 5, 32, and 33.

Thence I run

East, on a true line bet. secs. 4 and 33.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

10.00 Bottom of canon, 200 ft. below cor., course N.

Asc. abruptly.

40.00 Set an iron post, 3 ft. long, 1 in in dia., 12 ins. in the ground, on solid gravel, and surrounded by mound of earth and stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 53 in N half and 3 4 in S half; from which

An aspen, 5 ins. dia., bears $N. 67^{\circ}W.$, 227 lks.dist. mkd. $\frac{1}{2}$ S 23 B T.A red pine, 6 ins. dia., bears $S. 5^{\circ}W.$, 95 lks.dist. mkd. $\frac{1}{2}$ S 4 B T.

57.00 Top of ridge, 800 ft. above canon, bears N. and S.

Desc.

80.00 Point 700 ft. below ridge,

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, mkd. on brass cap

T 31 S S 33 in NW.

R 3 W S 34 in NE.

S. bdy. T. 31 S., R. 3 W. - Continued.

Chains

- R 3 W S 3 in SE.; and
- T 32 S S 4 in SW. quadrants; from which
- An aspen, 5 ins. dia., bears N. 41° E., 25 lks.
dist. mkd. T 31 S R 3 W S 34 B T.
- An aspen, 14 ins. dia., bears S. 50° 50' E., 23 lks.
dist. mkd. T 32 S R 3 W S 3 B T.
- An aspen, 5 ins. dia., bears S. 35° 30' W., 52 lks.
dist. mkd. T 32 S R 3 W S 4 B T.
- An aspen, 8 ins. dia., bears N. 38° W., 33 lks.
dist. mkd. T 31 S R 3 W S 33 B T.

Land, mountainous with steep smooth slopes .
 Soil, clay and gravelly about 2 ft. deep, subsoil, gravel.
 Timber, aspen, pine, and mahogany.
 Undergrowth, sage and deer and service berry brush.
 Good grass for grazing.
 Mountainous or heavily timbered land on 80.00 chs red
 with dense undergrowth, 30.00 chs.
 July 18, 1911: At this cor. I set off 21° 09' N., on the decl
 arc; at 0 h 6 m p.m., l.m.t., I observe the sun on the
 meridian, the resulting lat. is 38° 04' N., which is the
 proper lat. nearly.

East, on a true line bet. secs. 3 and 34.

Over mountainous land; through heavy timber and scattering
undergrowth.

Desc.

.10 Bottom of hollow, 10 ft. below cor.; course NE.

Asc.

5.80 Top of ridge, 50 ft. above hollow, bears N. and S.

Desc.

7.00 Bottom of hollow, 70 feet below ridge, course N.

Asc.

35.00 Top of ridge, 200 ft. above hollow, bears N. and S.

Desc.

55.15 Bottom of hollow, 60 ft. below ridge, course N.

S. hdy. T. 31 S., R. 3 W. - Continued.

Chains	Asc.
59.00	Spring branch, 3 lks. wide, 2 ins. deep, course NW.
40.00	Set an iron post, 3 ft. long, 1 in in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. $\frac{1}{2}$ S 34 in N half and S 3 in S half; from which <p style="margin-left: 40px;">A red pine, 10 ins. dia., bears N. 62° E., 30 lks. dist. mkd. $\frac{1}{2}$ S 34 B T. ✓</p> <p style="margin-left: 40px;">An aspen, 4 ins. dia., bears S. 74° W., 27 lks. dist. mkd. $\frac{1}{2}$ S 3 B T. ✓</p>
55.40	Top of abrupt ascent, bears N. and S. Asc. gradually.
57.75	Top of main ridge, 500 ft. above hollow, bears N. and S. Desc. gradually.
80.00	point 60 ft. below ridge, Set an iron post, 5 ft. long, 5 ins. in dia., 24 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, mkd. on brass cap <p style="margin-left: 40px;">T 31 S S 34 in NW. R 3 W S 35 in NE. R 3 W S 2 in SE.; and T 32 S S 3 in SW. quadrants; from which</p> <p style="margin-left: 40px;">An aspen, 8 ins. dia., bears N. 24° 30' E., 215 lks. dist. mkd. T 31 S R 3 W S 35 B T. ✓</p> <p style="margin-left: 40px;">An aspen, 8 ins. dia., bears S. 51° E., 14 lks. dist. mkd. T 32 S R 3 W S 2 B T. ✓</p> <p style="margin-left: 40px;">An aspen, 10 ins. dia., bears S. 62° W., 15 lks. dist. mkd. T 32 S R 3 W S 3 B T.</p> <p style="margin-left: 40px;">An aspen, 4 ins. dia. bears N. 45° 30' W., 13 lks. dist. mkd. T 31 S R 3 W S 34 B T. ✓</p> <p>Land, mountainous . Soil, sandy and clay loam; from 1 to 3 ft. deep. Timber, cedar and pinon pine, aspen and red pine. Undergrowth, sage and oak brush. Good grass for grazing. Mountainous or heavily timbered land, 80.00 chs.</p>

July, 18, 1911.

S. by T. 3E S., R. 5 W. - Continued.

Chains

July 19. 1911: At 7 h 6 m a.m., l.m.t. I set off $38^{\circ}04'N.$, on the lat. arc; $21^{\circ}01'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 2, 3, 34, and 35.

Thence I run

East, on a true line bet. secs. 2 and 35.

Over mountainous land; through heavy timber.

Desc. through scattering undergrowth.

16.00 Bottom of hollow, 100 ft. below cor., course H.

Asc.

31.00 Top of ridge, 125 ft. above hollow, bears N. and S.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 35 in N half and S 2. in S half; from which

An aspen, 4 ins. dia., bears $N. 3^{\circ}W.$, 15 lks.

dist. mkd. $\frac{1}{4}$ S 35 B T.

An aspen, 4 ins. dia., bears $S. 70^{\circ}W.$, 5 lks.

dist. mkd. $\frac{1}{4}$ S 2 B T.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 1, 2, 35, and 36, mkd. on brass cap

T 31 S S 35 in NW.

R 3 W S 36 in NE.

R 3 W S 1 in SE; and

T 32 S S 2 in SW quadrants; from which

An aspen, 8 ins. dia., bears $N. 69^{\circ}E.$, 20 lks.

dist. mkd. T 31 S R 3 W S 36 B T.

An aspen, 12 ins. dia., bears $S. 50^{\circ}E.$, 24 lks.

dist. mkd. T 32 S R 3 W S 1 B T.

A balsam, 10 ins. dia., bears $S. 9^{\circ}W.$, 35 lks.

dist. mkd. T 32 S R 3 W S 2 B T.

An aspen, 6 ins. dia., bears $N. 68^{\circ}30'W.$, 24 lks.

dist. mkd. T 31 S R 3 W S 35 B T.

Land, rolling high mountains.

Soil, gravelly and sandy about 3 ft. deep.

Chains

Timber, pine, aspen, fir, and mahogany.
 Undergrowth, deer brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, 80.00 chs.
 July 19, 1911: At this cor. I set off 20°58'N., on the decl.
 arc; and at 0 h 6 m p.m. l.m.t., I observe the sun on the
 meridian the resulting lat. is 58°04'N., which is the
 proper lat. nearly.

East, bet. secs. 1 and 36, on true line
 Over mountainous land; through heavy timber and scattering
 undergrowth.

Desc.

.50 Bottom of hollow, 10 ft. below cor., course NE.

Asc.

17.00 Top of ridge, 150 ft. above hollow, bears NE. and SW.

Desc.

38.50 Wood road, bears NE and SW.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 36 in N half
 and S 1 in S half; from which

An aspen, 5 ins. dia., bears N. 78°W., 11 lks.
 dist. mkd. 1 S 36 B T.

An aspen, 6 ins. dia., bears S. 77°W., 21 lks.
 dist. mkd. 2 S 1 B T.

65.00 Desc. gradually along side of swale., bears NE and SW.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the
 ground, for cor. of Tps. 31 and 32 S., Rs. 2 and 3 W., mkd. on
 brass cap

T 31 S in N half

T 32 S in S half

R 3 W S 36 in NW.

R 2 W S 31 in NE.

R 2 W S 6 in SE.; and

R 3 W S 1 in SW. quadrants; from which

Chains

An aspen, 4 ins. dia., bears N. 15° E., 100 lks.

dist. mkd. T 31 S R 2 W S 31 B T.

An aspen, 5 ins. dia., bears S. 10° E., 110 lks.

dist. mkd. T 32 S R 2 W S 6 B T.

An aspen, 6 ins. dia., bears S. 57° W., 84 lks.

dist. mkd. T 32 S R 3 W S 1 B T.

An aspen, 6 ins. dia., bears N. 25° W., 125 lks.

dist. mkd. T 31 S R 3 W S 36 B T.

Land, rolling mountains, high with smooth slopes.

Soil, rich loam about 3 ft. deep, subsoil, gravel.

Timber, cedar, pinon pine, aspen and pine.

Undergrowth, deep brush.

Mountainous or heavily timbered land, 80.00 chs.

July 19, 1911.

East bdy. T. 31 S R 3 W.

July 20, 1911: At 7 h 6 m a.m., l.m.t., I set off 38° 04' N., on the lat. arc; 20° 50' N., on the decl. arc; and determine a meridian with the solar, at the cor. of Tps. 31 and 32 S., Rs. 2 and 3 W.

Thence I run

North, bet. secs. 31 and 36.

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

15.00 Leave timber, bears E and W.

25.00 Wood road, bears E and W.

34.00 Top of ridge, 150 ft. above Tp. cor., bears N. 60° E. and S. 60° W.

Desc.

38.00 Enter heavy timber, bears E and W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec. cor. mkd. on brass cap 1/2 S 36 in W half

Chains

and S 31 in E half; from which

An aspen, 8 ins. dia., bears S. 74° E., 11 lks.

dist. mkd. $\frac{1}{4}$ S 31 E T.

An aspen, 8 ins. dia., bears S. 84° W., 20 lks.

dist. mkd. S 36 B T.

52.00 Bottom of hollow, 200 ft. below ridge, course E.

Asc.

65.00 Top of ridge, 125 ft. above hollow, bears E. and W.

Desc.

70.00 Bottom of hollow, 60 ft. below ridge, course E.

Asc.

71.00 Leave timber, bears E. and W.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 25, 30, 31, and 36, mkd. on brass cap

T 31 in N half

R 3 W S 25 in NW.

R 2 W S 30 in NE.

S 31 in SE.; and

S 36 in SW. quadrants; dig pits, 18x18x12 ins. in each

sec. 5- $\frac{1}{2}$ ft. dist.; and raise a mound of earth, 4 ft. base,

2 ft. high, W. of cor.

Land, rolling high mountains.

Soil, sandy about 3 ft. deep.

Timber, aspen and pine.

Undergrowth, deep brush in timber and sage and yellow brush in places not covered with heavy timber.

Good grass.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 20, 1911: At the noon hour the sky is overcast and solar observations are impossible.

North, bet. secs. 25 and 30.

Over mountainous ^{land} through dense undergrowth.

Asc.

Chains

- 2.00 Top of ridge, 10 ft. above cor., bears E. and W.
Desc.
- 3.00 Enter heavy aspen and pinon timber. Bears E. and W.
- 17.00 Bottom of hollow, 125 ft. below ridge, course E.
Leave heavy and enter scattering timber, bears E. and W.
Asc.
- 29.00 Top of ridge, 120 ft. above hollow, bears N. 60° E. and S. 60° W.
Leave timber, bears N. 60° E. and S. 60° W.
Desc.
- 36.50 Bottom of hollow, 50 ft. below ridge course N. 60° E.
Asc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 25 in W half and S 30 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 54.00 Top of ridge, 50 ft. above hollow, bears NE and SW.
Desc.
- 72.10 Bottom of hollow, 200 ft. below ridge, course NE.
Asc.
- 80.00 Set an iron post, 5 ft. long, 3 ins. in dia., 34 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, mkd. on brass cap
T 31 S in N half.
R 3 W S 24 in NW.
R 2 W S 19 in NE.
S 30 in SE.; and
S 25 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- Land, mountainous.
- Soil, sandy and clay loam. 1st rate 2 ft. deep. subsoil, clay.
- Timber, pine and aspen.
- Undergrowth, sage, deer brush, yellow brush, and oak.
- Good grass for grazing.
- Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

Chains

July 20, 1911.

July 21, 1911: At 7 h 6 m a.m., l.m.t., I set off $33^{\circ}05'N.$, on the lat. arc; $20^{\circ}39'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 19, 24, 25, and 30.

Thence I run

North, bet. secs. 19 and 24.

Over mountainous land; through dense undergrowth.

Asc.

3.50 Enter heavy timber, bears NE and SW.

5.50 Leave timber, bears NE and SW.

9.50 Top of ridge, 70 ft. above cor., bears NE and SW.

Desc.

14.50 Enter aspen timber, bears NE and SW.

16.00 Leave aspen timber, bears NE and SW.

22.50 Bottom of hollow, 50 ft. below ridge course N.

Asc.

39.50 Top of ridge, 60 ft. above hollow, bears $N. 30^{\circ}E.$ and $S. 50^{\circ}W.$

Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor., mkd. on brass cap: S 24 in W half and S 19 in E half; from which

An aspen, 7 ins. dia., bears $N. 5^{\circ}E.$, 390 lbs.

dist. mkd. $\frac{1}{2}$ S 19 E E.

An aspen, 6 ins. dia., bears $S. 78^{\circ}W.$, 150 lbs.

dist. mkd. $\frac{1}{2}$ S 24 E E.

44.50 Bottom of hollow, 20 ft. below ridge, course $N. 50^{\circ}E.$

Asc.

47.50 Enter heavy aspen timber, bears E and W.

51.00 Leave timber, bears E and W.

52.50 Top of ridge, 60 ft. above hollow, bears NE and SW.

Desc.

61.50 Enter aspen timber, bears NE and SW.

64.70 Leave timber, bears NE and SW.

Chains

- 67.20 Bottom of hollow, 60 ft. below ridge, course NE.
Asc.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 15, 18, 19, and 24, mkd. on brass cap
T 31 S in W half
R 5 W S 15 in NW.
R 2 W S 18 in NE.
S 19 in SE.; and
S 24 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Land, mountainous.
Soil, gravelly; 2nd rate.
Timber, aspen.
Undergrowth, deer brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
July 21, 1911: At this cor. I set off 20° 36' N., on the decl. arc; and at 6 p.m., l.m.t., I observe the sun on the meridian the resulting lat. is 38° 07' N., which is the proper lat. nearly.
-
- North, bet. secs. 15 and 18.
Over mountainous land; through dense undergrowth.
Asc.
- 14.00 Enter heavy timber, bears E. and W.
- 25.00 Top of ridge, 80 ft. above cor, bears NE and SW.
Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ½ sec. cor. mkd. on brass cap ½ S 13 in W half and S 18 in E half; from which
An aspen, 8 ins. dia., bears S. 86° E. 1.1 lks. dist. mkd. ½ S 18 E T.
An aspen, 8 ins. dia., bears S. 67° W., 1.9 lks. dist. mkd. ½ S 13 E T.

E. Bdy. T. 51 S., R. 3 W.-Continued.

Chains
 47.00 Leave timber, bears E. and W.
 50.00 Bottom of hollow, 60 ft. below ridge, course N. 80° W.
 Asc.
 65.00 Top of ridge, 120 ft. above hollow, bears NW. and SE.
 Desc.
 65.50 Enter heavy timber, bears E. and W.
 79.50 Leave timber, bears E. and W.
 80.00 Set an iron post, 5 ft. long, 3 ins. in dia., 24 ins. in the
 ground, for cor. of secs. 7, 12, 13, and 18 mkd. on brass cap
 T 51 S in W half
 R 3 W S 12 in NW.
 R 2 W S 7 in NE
 S 18 in SE.; and
 S 15 in SW. quadrants; from which
 An aspen, 6 ins. dia., bears S. 4° E., 80 lbs.
 dist. mkd. T 51 S R 2 W S 18 B E.
 An aspen, 8 ins. dia., bears S. 70° W., 140 lbs.
 dist. mkd. T 51 S R 3 W S 13 B E.
 No other trees raise a mound of stone 2 ft. base, 1 1/2
 ft. high, W. of cor.
 Land, mountainous.
 Soil, gravelly; 5rd rate.
 Timber, aspen.
 Undergrowth, deer brush and sage.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth. 80.00 chs.

July 21, 1911.

July 22, 1911.: At 7 h 6 m a.m. l.m.t., I set off 38° 07' N
 on the lat. arc; 20° 28' N., on the decl. arc; and determine
 a meridian with the solar, at the cor. of secs. 7, 12, 13,
 and 18.

Thence I run

Chains

North bet. secs. 7 and 12.

Over mountainous land; through dense undergrowth.

Desc.

1.00 Bottom of hollow, 20 ft. below ridge, course N. 80° W.

Asc.

14.00 Top of ridge, 140 ft. above hollow, bears N. 10° E. and S. 10° W.

Desc.

14.50 Enter heavy timber, bears same.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 12 in W half and S 7 in E half from which

An aspen, 6 ins. dia., bears S. 4° E., 65 lks.

dist. mkd. $\frac{1}{2}$ S 7 B T.

An aspen, 4 ins. dia., bears S. 62° W., 110 lks.

dist. mkd. $\frac{1}{2}$ S 12 B T.

42.50 Bottom of hollow, 30 ft. below ridge, course S. 20° W.

Asc.

70.00 Leave timber, bears E. and W.

680.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 1, 6, 7, and 12. mkd. on brass cap

T 31 S in N half.

R 3 W S 1 in NW.

R 2 W S 6 in NE.

S 7 in SE.; and

S 12 in SW. quadrants; afrom which

An aspen, 18 ins. dia., bears S. 60° W., 115 lks.

dist. mkd. T 31 S R 3 W S 12 B T.

An aspen, 20 ins. dia., bears N. 85° W., 130 lks.

dist. mkd. T 31 S R 3 W S 1 B T.

No other trees within limits; raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous.

Soil, soil gravelly 3rd rate. 2 ft. deep.

Timber, aspen. and pine.

Undergrowth, sage and deer brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered

CChains

with dense undergrowth, 80.00 chs.

July 22, 1911: At the noon hour the sky is overcast and solar observations are impossible.

North bet. secs. 1 and 6.

Over mountainous land; through dense undergrowth.

Asc.

12.00 Enter heavy timber, bears E and W.

28.00 Top of ridge, 200 ft. above cor., bears NE and SW.

Desc. abruptly.

Leave aspen and enter pine timber, bears NE and SW.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of earth and stone, for sec. cor. mkd. on brass cap 1/2 S 1 in W half and S 6 in E half; from which

An aspen, 4 ins. dia., bears N. 35° E., 3 lks.

dist. mkd. 1/2 S 6 B T.

A red pine, 5 ins. dia., bears S. 85° W., 12 lks.

dist. mkd. 1/2 S 1 B T.

65.71 Intersect 6th Standard Parallel South, 1780 chs. East of Standard cor. of Tps. 30 S., Rs. 2 and 3 W., heretofore described.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for closing cor. of Tps. 31 S., Rs. 2 and 3

W., mkd. on brass cap

C C T 30 S R 2 W S 31 R 3 W S 36 in N half.

T 31 S in S half

R 2 W S 6 in SE.; and

R 3 W S 1 in SW. quadrants; from which

An aspen, 5 ins. dia., bears S. 45° E., 28 lks.

dist. mkd. T 31 S R 2 W S 6 B T.

A pinon pine, 4 ins. dia., bears S. 30° W., 40 lks.

dist. mkd. T 31 S R 3 W S 1 B T.

Land, mountainous.

Soil, sandy 2nd rate.

E. bdy. T. 31 S., R. 3 W. - Continued.

Chains

Mountainous or heavily timbered land, or land covered with dense undergrowth, 65.71 chs.

John R Stewart

U. S. Transitman.

July 22, 1911.

Boundaries of T. 31 S., R. 3 W.

Latitudes Departures and Closing Errors.

Line Designated.	Course	Distance chs.	Latitudes		Departures	
			N. chs.	S. chs.	E. chs.	W. chs.
W. bdy. T. 31 S., R. 3 W. North		465.23	465.23			
N. bdy. T. 31 S., R. 3 W. N. 89° 27' E.	22.37	.20		22.57		
N. bdy. T. 31 S., R. 3 W. N. 89° 50' E.	40.27	.12		40.27		
N. bdy. T. 31 S., R. 3 W. N. 89° 32' E.	40.46	.55		40.46		
N. bdy. T. 31 S., R. 3 W. N. 89° 40' E.	40.12	.25		40.12		
N. bdy. T. 31 S., R. 3 W. N. 89° 46' E.	79.30	.38		79.30		
N. bdy. T. 31 S., R. 3 W. N. 89° 42' E.	38.19	.20		38.19		
N. bdy. T. 31 S., R. 3 W. N. 89° 53' E.	59.40	.08		59.40		
N. bdy. T. 31 S., R. 3 W. N. 89° 59' E.	59.70	.01		59.70		
N. bdy. T. 31 S., R. 3 W. N. 89° 49' E.	59.85	.15		59.85		
N. bdy. T. 31 S., R. 3 W. N. 89° 36' E.	39.90	.28		39.90		
E. bdy. T. 31 S., R. 3 W. S. 89° 50' E.	40.16			.12	40.16	
N. bdy. T. 31 S., R. 3 W. East	17.80				17.80	
E. bdy. T. 31 S., R. 3 W. South	465.71		465.71			
S. bdy. T. 31 S., R. 3 W. West	477.74					477.74
Convergence						.57
Totals		465.24	465.83	478.09	477.74	
			465.24	477.74		
Error in lat.				.55		
Error in dep.					.55	

For general description see Sub. T. 31 S., R. 3 W.

July 22, 1911

John R Stewart
U. S. Transitman.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 _____, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of Transitman see book "P" T. 32 S., R. 9 E.

_____ of the _____ Meridian, in the State of _____, which are represented by the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191 _____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18., 1914

The foregoing field notes of the survey of _____ the South and East Boundaries of Township No. 31 South, Range No. 3 West of the Salt Lake Base and Meridian _____ Utah, _____

executed by _____ John R. Stewart _____ under his special instructions dated _____ March 27 _____, 191 _____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-396

FIELD NOTES

OF THE SURVEY OF THE

Retracement of

SIXTH STANDARD PARALLEL SOUTH

through

RANGE NO. 3 WEST

Of the Salt Lake Base and Meridian,

the State of Utah

EXECUTED BY

Quinby Stewart

Transitman

the capacity of U. S. Surveyor, under instructions dated March 27, 1911,

issued by the United States Surveyor General to govern surveys included in

Group No. 8, which were approved by the Commissioner of the General Land

Office, April 22, 1911, pursuant to authority contained in the Act of

Congress dated, 1911.

Survey commenced July 19, 1911

Survey completed July 21, 1911

Ret. 6-00-00

ms 13

BOOK A-396

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Retracement 6th Standard Parallel South, Range 3 W.

Survey commenced July 19, 1911, and executed with a K. and E. transit No. 20578, with Smith's solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arc.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on Mar. 20, 1911.

I examine the adjustments of the instrument and correct the level and collimation errors; then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian established by Polaris observation; I proceed as follows:

At the standard cor. of Tp. 30 S., Rs. 3 and 4 W., heretofore described, latitude $38^{\circ}09'30''$ N., longitude $112^{\circ}13'30''$ W., I set off $38^{\circ}09'$ N. on the lat. arc; $20^{\circ}57'$ N. on the decl. arc; and at 5h 6m p.m., l.m.t., I determine a meridian with the solar and mark a point thereof on a stone firmly set in the ground 5.00 chs. N. of the cor.

At 11h 44.6m p.m., l.m.t., I observe the Polaris at eastern elongation in accordance with the Manual and mark a point in the line thus determined by a tack driven in a wooden plug set in the ground, 5.00 chs. N. of the cor.

July 19, 1911

July 20, 1911: At 6h 30m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29'$ to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.29 ins. east of the meridian established by the solar. At 7h 6m a.m., l.m.t., I set off $38^{\circ}09'$ N. on the lat. arc; $20^{\circ}50'$ N. on the decl. arc; and mark the meridian determined with the solar by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.26 ins. east of the

Retracement 6th Standard Parallel South, Range 3 W.

Chains	<p>meridian established by Polaris observation.</p> <p>The solar apparatus by p.m. and a.m. observations defines positions for meridians respectively about 0'15" west and 0'14" east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.</p> <p>The magnetic bearing of the meridian at 8h 0m a.m., l.m.t., is N.16°10'W., the angle thus determined gives the mag. decl. 16°10'E.</p> <hr/> <p>From the standard cor. of Tp. 30 S., Rs. 3 and 4 W., I run East on a retracement line along south side sec. 31 Over nearly level land in Circle Valley; through dense undergrowth. Asc. gently.</p> <p>17.90 Fall 18 lks. S. of the closing cor. of Tp. 31 S., Rs. 3 and 4 W., heretofore described.</p> <p>40.27 Fall 38 lks. S. of the standard $\frac{1}{4}$ sec. cor., on S. bdy. sec. 31 which is a vol. rock 10x10x13 ins., above ground, firmly set, mkd. and witnessed as described by the surveyor general.</p> <p>I destroy the old cor. and re-establish it in the same place as follows:</p> <p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for standard $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 31 in N half; and dig pits 18x18x12 ins., E. and W. of post, 3 ft. dist.; and raise a mound of earth, 3$\frac{1}{2}$ ft. base, 1$\frac{1}{2}$ ft. high, N. of cor.</p> <p>73.00 Wash, 12 lks. wide, 5 ft. deep, course NW.</p> <p>80.54 Fall 50 lks. S. of the standard cor. of secs. 31 and 32, which is a volcanic rock 5x10x8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:</p> <p>Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor. of secs. 31 and 32, mkd. on brass ca</p>
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Retracement 6th Standard Parallel South, R. 3 W. - Continued.

Chains

T 30 S S 31 in NW.

R. 3 W S 32 in NE. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. on the land, nearly level valley.

Soil, sandy and gravelly loam about 18 ins. deep, subsoil gravel.

No timber.

Undergrowth, greasewood.
Good grass for grazing.

Land covered with dense undergrowth, 80.54 chs.

The course of the west half of this mile is, therefore N. 89° 27' E., 40.27 chs. and the east half is N. 89° 50' E., 40.27 chs.

East, on a retracement line along south side sec. 32.

Over nearly level valley; through dense undergrowth.

Asc. gradually.

40.46 Fall 33 lks. S. of the standard $\frac{1}{2}$ sec. cor., which is a vol. rock, 12x20x16 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for Standard $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 32 in N. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

50 00 Wash, 40 lks. wide, 3 ft. deep, course N. 25° E.

55.00 Wash, 30 lks. wide, 4 ft. deep, course N.

66.00 Wash, 40 lks. wide, 4 ft. deep, course NW.

72.50 Wood road; bears N. 20° W. and S. 20° E.

77.00 Wash, 20 lks. wide, 2 ft. deep, course N. 30° W.

80.58 Fall 56 lks. S. of the cor. of secs. 32 and 33, which is a

vol. stone, 10x12x9 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same

Retracement 6th Standard Parallel South, through R. 3 W. - Contd.

Chains place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for standard cor. of secs. 32 and 33, mkd. on brass cap T 30 S S 32 in NW.; and

R 3 W S 33 in NE. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

The course of the west half of this mile is therefore N. 89° 32' E., 40.46 chs. and the east half is N. 89° 40' E., 40.12 chs.

Land nearly level valley.

Soil, sandy and gravelly loam; 2nd rate. about 2 ft. deep.

Subsoil, gravel.

No timber.

Undergrowth, sage brush and greasewood.

Good grass.

Land covered with dense undergrowth, 80.58 chs.

July 20, 1911: At this cor. I set off 20° 47' N., on the decl. arc; and at 0 h 6 m p.m., 1 m.t., I observe the sun on the meridian, the resulting lat. is 38° 09' N., which is the proper lat. nearly.

East, on a retracement line along south side sec. 33.

Over nearly level valley, through dense sage brush.

Asc. gently.

15.80 Wash; 110 lks. wide, 8 ft. deep, course N. 70° W.

Leave valley, bears same.

Asc.

34.00 Top of ridge, 40 ft. above wash, bears N. 70° W. and S. 70° E.

Desc.

36.00 Bottom of hollow, 50 ft. below ridge, course N. 70° W.

Asc.

39.42 Fall 16 lks. S. of the Standard ¼ sec. cor., which is a hard sandstone, 8x12x15 ins. lying on top of ground, mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish in the same

Retracement 6th Standard Parallel South, through R. 3 W. - Continued.

- Chains place as follows:
- Set an iron post, 3 ft. long; 1 in. in dia., 26 ins. in the ground, for standard $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 33 in N. half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 62.50 Top of ridge, 300 ft. above hollow, bears N. and S.
Done.
- 66.00 Enter scattering timber, bears N. and S.
- 71.00 Bottom of hollow, 160 ft. below ridge, course N. 35° W.
Asc.
- 79.30 Fall 38 lks. South of Standard cor. of secs. 33 and 34, which is a sandstone, 10x10x6 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:
- Set an iron post, 3 ft. long, 3 in. in dia., 24 ins. in the ground, for standard cor. of secs. 33 and 34, mkd. on brass cap
T 30 S S 33 in NW.
R 3 W S 34 in NE quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- The course of this mile is therefore N. 89° 46' E., 79.30 chs.
- Land, level on 71.50 chs. mountainous on balance.
Soil, gravelly 3rd rate, 2 ft. deep, with cemented gravel subsoil.
Timber, scattering cedar and pinon pine timber.
Undergrowth, sage and greasewood.
Good grass.
- Mountainous land, or land covered with dense undergrowth,
79.30 chs.
- July 20, 1911.
- July 21, 1911: At 7 h 6 m a.m., l.m.t., I set off 38° 09' N., on the lat. arc; 20° 39' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 33 and 34.
- Thence I run

Retracement 6th Standard Parallel South, R.3 W.-Continued.

Chains

- East, on a retracement line along south side sec. 34. 1.00
- Over mountainous land; through scattering sage brush and scattering timber.
- Asc.
- 10.40 Wood road, bears NE and SW.
- 20.00 Top of ridge, 340 ft. above cor., bears N. 60° W. and S. 60° E.
- Desc.
- 28.00 Bottom of hollow, 80 ft. below ridge, course N. 10° E.
- Asc.
- 36.00 Top of ridge, 100 ft. above hollow, bears N. 80° W. and S. 80° E.
- Desc.
- 38.19 Fall 20 lks. South of the Standard $\frac{1}{4}$ sec. cor., which is granite stone, 14x16x20 ins. loosely set, and mkd. and witnessed as described by the surveyor general.
- I destroy the old cor. and re-establish it in the same place as follows:
- Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for standard $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 34 N half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.
- 51.50 Bottom of hollow, 70 ft. below ridge, course N. 20° W.
- Asc.
- 72.10 Top of ridge, 250 ft. above hollow, bears N. 50° W. and S. 50° E.
- Desc.
- 77.59 Fall 28 lks. S. of the standard cor. of secs. 34 and 35, which is a granite stone, 6x12x10 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
- I destroy the old cor. and re-establish it in the same place as follows:
- Set an iron post, 3 ft. long, 3 in. in dia., 26 ins. in the ground, for standard cor. of secs. 34 and 35, mkd. on brass
- T 30 S S 34 in NW.; and
- R 3 W S 35 in NE. quadrants; from which
- A pinon pine, 6 ins. dia., bears N. 78° E., 27 lks. dist.; mkd. T 30 S S 34 W S 35

Retracement 6th Standard Parallel South, R. 3 W. - Continued

Chains

A pinon pine, 7 ins. dia. bears N. 40° W., 7 lks. dist., mkd. T 30 S R 3 W S 34 E T

The course of the west half of this mile is therefore N. 89° 42' E., 38.19 chs., the east half is N. 89° 53' E. 38.40 chs.

Land, mountainous.

Soil, gravelly and rocky, 1 to 2 ft. deep. Subsoil, gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 77.59 chs.

East on a retracement line along south side sec. 35 Over mountainous land; through dense undergrowth and scattering timber.

Desc.

5.50 Bottom of hollow, 40 ft. below cor., course N.

Asc.

11.00 Top of spur, 50 ft. above hollow, bears N. 30° W. and S. 30° E.

Desc.

16.00 Bottom of hollow, 80 ft. below ridge, course N. 60° W.

Asc.

23.70 Top of ridge, 400 ft. above hollow, bears N. 10° E. and S. 10° W.

Desc.

39.70 Fall 1 lk. South of the Standard 1/4 sec. cor., which is a granite stone 10x12x10 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general. I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for Standard 1/4 sec. cor., mkd. on brass cap 1/4 S 35 in N. half; from which

A cedar, 6 ins. dia., brs. N. 84° W., 62 lks. dist., mkd. S C 1/4 S 35 B T

No other trees within limits; raise a mound of stone, 2

Retracement 6th Standard Parallel South, R. 3 W.- Continued

Chains	
	ft. base, 1½ ft. high, N. of cor. ✓
47.00	Bottom of hollow, 150 ft. below ridge, course N. 10° W. Asc.
50.00	Top of ridge, 110 ft. above hollow, brs. N. and S. Desc.
65.00	Bottom of canon, 600 ft. below ridge, course N. 20° E. Asc.
72.50	Top of ridge, 300 ft. above canon, bears N. and S. Desc.
76.00	Bottom of hollow, 150 ft. below ridge, course N. 25° W.
	Asc.
79.00	Top of ridge, 100 ft. above hollow, brs. N. 20° W. and S. 20° E.
	Desc.
79.55	Fall 14 lks. South of the standard cor. of secs. 35 and 36,
	which is a sandstone 9x12x10 ins. above ground, firmly set
	and mkd. and witnessed as described by the surveyor gener-
	al. I destroy the old cor. and re-establish it in the
	same place as follows:
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the
	ground for standard cor. of secs. 35 and 36, mkd. on brass cap
	T 30 S S 35 in NW ✓
	R 3 W S 36 in NE. quadrants; from which
	A pinon pine, 6 ins. dia., brs. N. 82° E., 12 lks. dist.,
	mkd. T 30 S R 3 W S 36 B T ✓
	A pinon pine, 6 ins. dia., bears N. 45° W., 28 lks. dist.,
	mkd. T 30 S R 3 W S 35 B T ✓
	The course of the west half of this mile is, therefore,
	N. 89° 59' E., 39.70 chs.; the east half is N. 89° 49' E.,
	39.85 chs.
	Land, mountainous.
	Soil, sandy and gravelly; 2nd rate, subsoil, gravel.
	Timber, cedar and pinon pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous land, 79.55 chs.
	July 21, 1911: At this cor. I set off 20° 36' N. on the decl.
	arc; and at 0h 6m p.m., l.m.t., I observe the sun on the
	meridian, the resulting lat. is 38° 09' N., which is the pro-
	per lat. nearly.

Retracement 6th Standard Parallel South, R.3 W., Contd.

Chains

East, on a retracement line along south side sec. 36.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

5.00 Bottom of hollow, 50 ft. below cor., course N. 30° W.

Asc.

7.00 Top of ridge, 30 ft. above hollow, bears NW and SE.

Desc.

9.00 Bottom of hollow, 70 ft. below ridge, course NW.

Asc.

22.50 Top of spur, 70 ft. above hollow, bears N. 40° W. and S. 40° E.

Desc.

29.00 Bottom of canon, 350 ft. below ridge, course NW.

Asc.

39.90 Fall 28 lbs. S. of the old Standard $\frac{1}{2}$ sec. cor., which is a sandstone, 9x7x4 ins., above ground, loosely set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 1 in in dia., 26 ins. in the ground, for Standard $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 36 in N. half; and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

50.00 Leave timber, bears N. and S.

69.00 Top of ridge, 700 ft. above canon, bears NW and SE.

Desc.

78.50 Bottom of hollow, 60 ft. below ridge, course N. 30° E.

Asc.

80.06 Fall 16 lbs. S. of the Standard cor. of Tps. 30 S., Rs. 2 and 3 W., which is a sandstone, 12x12x10 ins., above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

I destroy the old cor. and re-establish it in the same place as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for Standard cor. of Tps. 30 S., Rs. 2 and 3 W., mkd.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly surveyed in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of transitman see book "P" T.32 S., R.9 P.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____



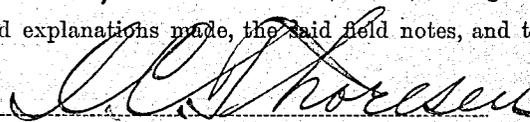
APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18, 1914

The foregoing field notes of the ~~XXXXXX~~ retracement of the Sixth Standard Parallel South, through Range No.3 West of the Salt Lake Base and Meridian, Utah, _____

executed by _____ Quinby Stewart _____ under his special instructions dated _____ March 27, _____, 191____, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ~~surveys they describe~~ retracements, are hereby approved.


U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

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BOOK A-396

K.

CMS.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION ✓

of

TOWNSHIP NO. 31 SOUTH, RANGE NO. 3 WEST

Of the Salt Lake Base and Meridian,

the State of Utah

EXECUTED BY

John R. Stewart and Quinby Stewart

the capacity of U. S. ^{Transitmen} ~~Surveyor~~, under instructions dated March 27, 1911, issued by the United States Surveyor General to govern surveys included in Group No. 8, which were approved by the Commissioner of the General Land Office, April 22, 1911, pursuant to authority contained in the Act of Congress dated _____, 1911.

Survey commenced July 22, 1911 ✓

Survey completed August 9, 1911 ✓

Subs. 58-72-27 ✓

Blowing 78.25 ✓

BOOK A-396

FIELD NOTES

DECEMBER 1900

INDEX DIAGRAM.

Township 31 South, Range 3 West.

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19	68	20	53	21	37	22	22	23	6	24
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30	64	29	50	28	35	27	19	26	4	25
63		62		48		34		18		3
31	61	32	47	33	32	34	17	35	1	36

Sub. T. 31 S., R. 3 W.

Survey commenced July 22, 1911, and executed with a K. and E. transit No. 20578, with Smith's solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs:

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, on Mar. 20, 1911.

Note:-For complete test of instrument see notes of Re-tracement 6th Standard Parallel South, through R. 3 W.

At the cor. of secs. 1, 2, 35 and 36, on S. bdy. of Tp., latitude $38^{\circ}04'17''N.$, longitude $112^{\circ}08'03''W.$, at 5h 31.9m a.m.

l.m.t.; I observe Polaris at upper culmination in accordance with the Manual, and mark the meridian thus determined on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 7h 6m a.m., l.m.t., I set off $38^{\circ}04'N.$ on the lat. arc; and $20^{\circ}28'N.$ on the decl. arc; and determine a meridian with the solar and mark a point thereof on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.4 ins. east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

From the cor. of secs. 1, 2, 35 and 36, on S. bdy. of Tp., heretofore described, I run

N. $0^{\circ} 01'W.$ bet. secs. 35 and 36

Over mountainous land; through heavy timber.

Asc. through scattering undergrowth.

8.75 Top of ridge, 140 ft. above cor., bears NE. and SW.

Desc.

15.00 Bottom of hollow, 40 ft. below ridge, course E.

Asc.

17.00 Leave timber, bears E. and W.

Sub. T. 31 S., R. 3 W.-Continued

Chains	
25.00	Top of ridge, 125 ft. above hollow, bears NE. and SW. Desc.
40.00	Bottom of hollow, 60 ft. below ridge, course NE. Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 35 in W. half and S 36 in E half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
60.00	Top of ridge, 60 ft. above hollow, bears NE. and SW. Desc.
74.80	Bottom of hollow, 40 ft. below ridge, course NE. Enter heavy timber, bears NE. and SW. Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 25, 26, 35 and 36, mkd. on brass cap T 31 S S 26 in NW R 3 W S 25 in NE S 36 in SE. and S 35 in SW. quadrants; from which An aspen, 8 ins. dia., bears N. 33° E., 22 lks. dist., mkd. T 31 S R 3 W S 25 B T An aspen, 4 ins. dia., bears S. 27° E., 12 lks. dist., mkd. T 31 S R 3 W S 36 B T An aspen, 5 ins. dia., bears S. 50° W., 17 lks. dist., mkd. T 31 S R 3 W S 35 B T An aspen, 5 ins. dia., bears N. 45° W., 38 lks. dist., mkd. T 31 S R 3 W S 26 B T Land, mountainous. Soil, sandy loam 1st rate about 2 ft. deep. Timber, aspen, pine, and fir. Undergrowth, deer brush, yellow brush and sage. Good grass for grazing. Mountainous land, or heavily timbered land, 80.00 chs. July 22, 1911: At this cor. I set off 20° 24' N. on the decl. arc; and at Oh 6m p.m., 1.m.t., I observe the sun on the meridian, the resulting lat. is 38° 05' N., which is the

Sub. T. 31 S., R. 3 W. - Continued.

Chains

proper lat. nearly.

- East, on a random line bet. secs. 25 and 36.
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.10 Intersect E. bdy. of Tp. 7 lks. S. of the cor. of secs. 25, 30,
 31, and 36, heretofore described.
- Thence I run
- S. $89^{\circ}57'$ W., on a true line bet. secs. 25 and 36.
 Over mountainous land; through dense undergrowth.
 Asc. along side of ridge.
- 20.00 Enter heavy timber, bears N. 70° E. and S. 70° W.
- 25.00 Leave timber, bears NE and SW.
- 35.00 Enter heavy timber, bears N. and S.
- 39.00 Top of ridge, 100 ft. above sec. cor., bears NE and SW.
 Desc.
- 40.05 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{2}$ sec. cor., mkd. on brass cap $\frac{1}{2}$ S 25 in N half
 and S 36 in S half; from which
- An aspen, 4 ins. dia., bears N. 15° E., 12 lks. dist.
 mkd. $\frac{1}{2}$ S 25 B' T.
- An aspen, 4 ins. dia., bears S. 10° E., 11 lks.
 dist. mkd. $\frac{1}{2}$ S 36 B' T.
- Leave timber, bears NE and SW.
- 46.50 Bottom of hollow, 50 ft. below ridge, course NE.
 Asc.
- 50.00 Enter heavy timber, bears N. and S.
- 65.00 Top of ridge, 75 ft. above hollow, bears NE and SW.
 Desc.
- 71.50 Leave timber, bears NE and SW.
- 73.90 Bottom of hollow, 50 ft. below ridge, course NE.
 Asc.
- 76.00 Enter heavy timber, bears NE and SW.
- 80.10 The cor. of secs. 25, 26, 35, and 36.
- Land, mountainous with smooth and gradual slopes.
 Soil, sandy from 2 to 4 ft. deep. subsoil, gravel.

Chains

Timber, aspen.
 Undergrowth, patches of deep brush, some yellow brush and short sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 80.10 chs.

July 22, 1911.

July 25, 1911: At 7 h 6 m a.m., l.m.t., I set off $38^{\circ}05'N.$, on the lat.arc; $19^{\circ}50'N.$, on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 25, 26, 35, and 36.

Thence I run

$N.0^{\circ}01'W.$, bet. secs. 25 and 26.

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

15.00 Top of ridge, 60 ft. above cor., bears NE and SW.

Desc. gradually along west slope of ridge.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 26 in W half and S 25 in E half; from which

An aspen, 8 ins. dia., bears $S.52^{\circ}E.$, 50 lks.

dist. mkd. $\frac{1}{4}$ S 25 B T.

An aspen, 8 ins. dia., bears $N.80^{\circ}W.$, 11 lks.

dist. mkd. $\frac{1}{4}$ S 26 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 23, 24, 25, and 26, mkd. on brass cap

T 31 S S 23 in NW.

R 3 W S 24 in NE.

S 25 in SE.; and

S 26 in SW quadrants; from which

An aspen, 6 ins. dia., bears $N.50^{\circ}E.$, 12 lks.

dist. mkd. T 31 S R 3 W S 24 B T.

An aspen, 6 ins. dia., bears $S.30^{\circ}E.$, 9 lks.

Sub.T.31 S.,R.3 W.-Continued.

Chains

dist..mkd.T 31 S R 3 W S 25 B T.

An aspen,6 ins.dia.,bears S.50°W.,5 lks.

dist..mkd.T 31 S R 3 W S 26 B T.

An aspen,8 ins.dia.,bears N.75°W.,5 lks.

dist..mkd.T 31 S R 3 W S 23 B T.

Land rolling mountainous.

Soil,sandy loam about 3 ft.deep,subsoil,clay and gravel.

Timber,heavy aspen.

Undergrowth,deer brush.

Hood grass for grazing.

Mountainous or heavily timbered land,80.00 chs.

July 25,1911:At this cor.I set off 19°48'N.,on the decl. arc;and at 0 h 6 m p.m.,l.m.t.,I observe the sun on the meridian,the resulting lat.is 38°06'N.,which is the proper lat.nearly.

N.89°57'E.on a random line bet.secs.24 and 25.

40.00 Set temp.1/2 sec.cor.

80.06 Intersect N.and S.line,9 lks.N.of the cor.of secs.19,24, 25,and 30. on E.bdy.of Tp., heretofore described.

Thence I run

N.89°59'W.,on a true line bet.secs.24 and 25.

Over rolling mountainous land;through scattering timber and dense undergrowth.

Asc.

20.00 Top of ridge,200 ft.above cor.,bears N.60°E.and S.60°W. Desc.

40.03 Bottom of hollow,40 ft:below ridge,course N.80°E.

Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for 1/2 sec.cor..mkd.on brass cap.1/4 S 24 in N half and S 25 in S half;and dig pits,.18x12x12,ins.E.and W. of post,3 ft.dist.;and raise a mound of earth,3 1/2 ft. base,1 1/2 ft.high,N.of cor.

Asc.

60.00 Enter heavy timber,bears N.and S:

Sub.T.31 S.,R.3 W.-Continued.

Chains	
64.00	Top of ridge, 100 ft. above hollow, bears N. and S. Desc.
80.06	The cor. of secs. 23, 24, 25, and 26. Land, mountainous
	Soil, sandy loam about 4 ft. deep. Timber, aspen.
	Undergrowth, deer brush. and yellow brush. Good grass.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.06 chs.
	July 25, 1911.
	July 26, 1911: At 7 h 6 m a.m., l.m.t., I set off 38° 06' N., on the lat. arc; 19° 38' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 23, 24, 25, and 26.
	Thence I run N. 0° 01' W., bet. secs. 23 and 24.
	Over mountainous land; through heavy timber. Desc.
5.50	Leave timber, bears E. and W. Enter dense deer brush, bears E. and W.
20.50	Enter scattering timber, bears E. and W.
31.00	Bottom of hollow, 100 ft. below ridge, course NE. Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 23 in W half and S 24 in E half; and dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
60.00	Top of ridge, 200 ft. above hollow, bears NE and SW. Enter heavy timber, bears same. Desc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs 13, 14, 23, and 24, mkd. on brass ca

Chains

T 31 S S 14 in NW.
 R 3 W S 13 in NE.
 S 24 in SE.; and
 S 25 in SW. quadrants; from which
 A red pine, 4 ins. dia., bears N. 20° E., 36 lks.
 dist..mkd. T 31 S R 3 W S 13 B T.
 A red pine, 7 ins. dia., bears S 68° E., 13 lks.
 dist..mkd. T 31 S R 3 W S 24 B T.
 A red pine, 6 ins. dia., bears S. 70° W., 47 lks.
 dist..mkd. T 31 S R 3 W S 23 B T.
 A red pine, 6 ins. dia., bears N. 60° W., 70 lks.
 dist..mkd. T 31 S R 3 W S 14 B T.

Land, rolling mountainous.

Soil, sandy about 3 ft. deep. subsoil, clay.

Timber, pine, aspen, fir, and red pine.

Undergrowth, deer brush and sage and yellow brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 26, 1911: At this cor. I set off 19° 35' N., on the decl. arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is 38° 07' N., which is the proper lat. nearly.

S. 89° 59' E., on a random line bet. secs. 13 and 24.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.08 Intersect E. bdy. of Tp. 2 lks. S. of the cor. of secs. 13, 18, 19, and 24, heretofore described.

Thence I run

West, on a true line bet. secs. 13 and 24.

Over mountainous land; through dense undergrowth.

Asc.

4.00 Enter heavy timber, bears N. and S.

- Chains
- 8.00 Leave timber, bears N. and S.
- 10.00 Top of ridge, 80 ft. above cor., bears N. 30° E. and S. 30° W.
Desc.
- 18.00 Enter heavy timber, bears N. and S.
- 29.00 Bottom of hollow, 80 ft. below ridge, course N. 30° E.
Asc.
- 40.04 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec. cor. mkd. on brass cap 1/4 S 13 in N half and S 24 in S half; from which
An aspen, 8 ins. dia., bears N. 15° W., 12 lks.
dist. mkd. 1/4 S 13 B T.
An aspen, 6 ins. dia., bears S. 5° E., 8 lks.
dist. mkd. 1/4 S 24 B T.
- 41.50 Leave timber, bears N. and S.
- 47.00 Enter heavy timber, bears N. and S.
- 54.50 Leave timber, bears N. and S.
- 55.00 Top of ridge, 100 ft. above hollow, bears N. 20° W. and S. 20° E.
Desc.
- 65.00 Enter heavy timber, bears N. and S.
- 73.50 Bottom of canon 400 ft. below ridge, course N. 60° W.
Asc.
- 80.08 The cor. of secs 13, 14, 23, and 24.

Land, rolling mountains with gradual smooth slopes.
Soil, sandy and clay loam; 3 ft. deep subsoil clay.
Timber aspen.
Undergrowth, deer brush.
Good grass .

Mountainous or heavily timbered land, 80.08 chs.

July 26, 1911.

July 27, 1911: At 7 h 6 m a.m., l.m.t., I set off 38° 07' N. on the lat. arc; 19° 25' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs.

Sub.T.31 S.,R.3 W.-Continued.

Chains

13,14,23,and 24.

Thence I run

N.0°01'W.,bet.secs.13 and 14.

Over mountainous land;through heavy timber and dense under growth.

Desc.

7.00 Bottom of hollow,150 ft.below cor.,course N.30°W.

Asc.

8.50 Leave timber,bears E.and W.

15.00 Top of ridge,120 ft.above hollow,bears N.70°E.and S.70°W.

Desc.

16.00 Enter scattering timber,bears E.and W:

18.00 Enter heavy timber,bears E.and W.

35.00 Bottom of canon,600 ft.below ridge,course N.30°E.

Asc.

36.00 Leave timber,bears E.and W:

40.00 Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone, for 1/2 sec.cor..mkd.on brass cap 1/2 S 14 in W half and S 13 in E half;and raise a mound of stone,2 ft.base,1 1/2 ftlhigh,W.of cor.

54.00 Top of ridge,300 ft.above canon,bears NE.and SW.

Desc.

56.00 Bottom of hollow,40 ft.below ridge,course N.60°E.

Asc.

65.00 Top of ridge,200 ft.above hollow bears N.75°E.and S.65°W.

Desc.

72.00 Bottom of hollow,150 ft.below ridge,course N.70°E.

Asc.

76.00 Top of ridge,100 ft.above hollow,bears N.70°E.and S.70°W.

Desc.

79.80 Bottom of hollow,60 ft below ridge,course N.60°E.

Asc.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,14 ins.in the ground,on rock,and surrounded by mound of stone,for cor.of

Chains

secs.11,12,13,and 14.,mkd.on brass cap
 T 31 S S 11 in NW.
 R 3 W S 12 in NE.
 S 13 in SE.;and
 S 14 in SW.quadrants;and raise a mound of stone
 2 ft.base,1½ ft.high,W.of cor.
 Land,mountainous.
 Soil,clay and gravelly;1 to 2 ft.deep.
 Subsoil,gravel.
 Timber,aspen and pine.
 Undergrowth,sage and deer brush.
 Good grass :
 Mountainous or heavily timbered land,or land covered
 with dense undergrowth,80.00 chs.
 July 27,1911:At this cor.I set off 19°22'N.,on the decl.
 arc;and at 0 h 6 m p.m.,l.m.t.,I observe the sun on the
 meridian,the resulting lat.is 38°08'N.,which is the
 proper lat.nearly.
 East,on a random line bet.secs.12 and 13.
 40.00 Set temp.¼ sec.cor.
 80.02 Intersect E.bdy.of Tp.5 lks.S.of the cor.of secs.7,12,
 13,and 18, heretofore described.
 Thence I run
 S.89°59'W.,on a true line bet.secs.12 and 13.
 Over mountainous land;through dense undergrowth.
 Asc.
 7.00 Enter heavy timber,bears N.and S.
 12.30 Top.of ridge,60 ft.above cor.,bears N.20°W.and S.20°E.
 Desc.
 16.00 Bottom of hollow,40 ft.below ridge,course N.10°W.
 Asc.
 21.00 Top of ridge,80 ft.above hollow,bears N.30°W.and S.30°E.
 Desc.

Sub.T.31 S.,R.3 W.-Continued.

Chains

- 39.00 Bottom of hollow 200 ft. below ridge, course NW.
Asc.
- 40.01 Set an iron post, 3 ft. long, 1 in in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 12 in N half and S 13 in S half; from which
- A red pine, 26 ins. dia., bears N.75°W., 22 lks.
dist. mkd. $\frac{1}{4}$ S 12 B T.
- A red pine, 4 ins. dia., bears S.68°E., 24 lks.
dist. mkd. $\frac{1}{2}$ S 13 B T.
- 50.00 Top of ridge, 400 ft. above hollow, bears N.20°E. and S 20°W.
Desc.
- 55.00 Bottom of hollow, 60 ft. below ridge, course N.10°W.
Asc.
- 60.00 Top of ridge, 80 ft. above hollow bears NW and SE.
Desc.
- 70.00 Bottom of canon, 600 ft. below ridge, course N.30°E. Asc.
- 79.00 Bottom of hollow, 20 ft. above canon, course N.60°E.
- 80.02 The cor. of secs. 11, 12, 13, and 14.
- Land, mountainous .
Soil, gravelly 2nd rate. 2 ft. deep.
Timber, pine and aspen.
Undergrowth, sage and deer brush.
Good grass .
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.02 chs.
- July 27, 1911.
- July 28, 1911: At 7 h 6 m a.m., l.m.t., I set off 38°08'N., on the lat. arc; 19°12'N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 11, 12, 13, and 14.
- Thence I run
N.0°01'W., bet. secs. 11 and 12.
Over mountainous land; through scattering timber and

- Chains
- dense undergrowth.
- Asc.
- 7.00 Top of ridge, 150 ft. above cor., bears N.80°E. and S.80°W.
- Desc.
- 14.00 Bottom of hollow, 40 ft. below ridge, course N.70°E.
- Asc.
- 15.50 Top of ridge, 100 ft. above hollow, bears N.70°E. and S.70°W.
- Desc.
- 21.50 Bottom of hollow, 120 ft. below ridge, course N.60°E.
- Asc.
- 30.00 Top of ridge, 150 ft. above hollow bears N.80°W. and S.80°E.
- Desc.
- 40.00 Creek, 3 lks. wide, 2 ins. deep, in bottom of canon, 500 ft. below ridge, course N.30°W.
- Cannot set cor. at this point therefore at
- 39.67 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for witness cor. to $\frac{1}{2}$ sec. cor. mkd. on brass cap
T 31 S R 3 W in N half W C $\frac{1}{2}$ S 11 in W half
and S 12 in E half; from which
- An aspen, 4 ins. dia., bears N.35°E., 6 lks. dist. mkd. W C $\frac{1}{2}$ S 12 B T.
- A balsam, 8 ins. dia., bears S.70°W., 18 lks. dist. mkd. W C $\frac{1}{2}$ S 11 B T.
- 65.00 Top of ridge, 300 ft. above canon, bears E. and W.
- Desc.
- 75.00 Bottom of hollow, 130 ft. below ridge, course N.80°W.
- Asc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 1, 2, 11, and 12, mkd. on brass cap
T 31 S S 2 in NW.
R 3 W S 1 in NE.
S 12 in SE. and
S 11 in SW. quadrants; from which
A pinon pine, 8 ins. dia., bears N.5°E., 33 lks.

Chains

- dist.mkd.T 31 S R 3 W S 1 B T.
 A pinon pine, 4 ins.dia., bears S.70°E., 34 lks.
 dist..mkd.T 31 S R 3 W S 12 B T.
 A cedar, 4 ins.dia., bears S.31°W., 28 lks.
 dist.,mkd.T 31 S R 3 W S 11 B T.
 A pinon pine, 12 ins.dia., bears N.74°W., 9 lks.
 dist..mkd.T 31 S R 3 W S 2 B T.
- Land, mountainous .
 Soil, gravelly loam; 18 ins. deep. subsoil, clay and gravel.
 Timber, cedar, pinon pine, red pine, balsam, and aspen.
 Undergrowth, oak and sage brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth,
 80.00 chs.
- July 28, 1911? At this cor. I set off 19°08'N., on the decl.
 arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the
 meridian the resulting lat. is 38°09'N., which is the proper
 lat. nearly.
- N.89°58'E., on a random line bet.secs.1 and 12.
- 40.00 Set temp. $\frac{1}{4}$ sec.cor.
 80.00 Intersect E.bdy.of Tp. 10 lks.S.of the cor.of secs.1, 6, 7,
 and 12., heretofore described.
 Thence, I run
 S.89°54'W., on a true line bet.secs.1 and 12.
 Over mountainous land; through dense undergrowth and
 heavy timber.
 Asc.
 15.00 Top of ridge, 300 ft.above cor., bears NE and SW.
 Desc. gradually.
 29.48 Top of perpendicular ledge, 200 ft.high, bears NE and SW.
- Note: The line descends abruptly over a series of ledges
 and the $\frac{1}{4}$ sec.cor.will fall in ledges where cor.cannot
 be perpetuated therefore at this point I
 Set an iron post, 3 ft.long, 1 in.in dia., 26 ins.in the

Sub.T.31 S. R.3 W.-Continued

Chains

ground, for witness cor. to 1/4 sec. cor. mkd. on brass cap
T. 31 S. R. 3 W. W. C. 1/4 S. 1 in N half and S 12 in S half;
from which

A pinon pine, 14 ins. dia., bears N. 72° E., 32 lks.
dist. mkd. W C 1/2 S. 1 B. T.

A pinon pine, 4 ins. dia., bears S. 78° W., 24 lks.
dist. mkd. 1/4 S 12 W C. B. T.

Desc. abruptly over ledges.

40.04 1/2 Point for 1/4 sec. cor falls on ledges, not set.

43.00 Bottom of canon, 700 ft. below ledge, course NW.
Asc. over ledges.

65.00 Top of ridge, 600 ft. above canon, bears N. 60° W. and S. 60° E.
Leave ledges.

Desc.

80.09 The cor. of secs. 1, 2, 11, and 12.

Land, mountainous.

Soil, sandy and gravelly loam; from 1 to 2 ft. deep, subsoil
clay and gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.09 chs.

July 28, 1911

July 29, 1911: At 7 h 6 m a.m., l. m t., I set off 38° 09' N.

on the lat. arc; 18° 58' N., on the decl. arc; and determine a
meridian with the solar, at the cor. of secs. 1, 2, 11, and
12.

Thence I run

N. 0° 01' W., on a true line bet. secs. 1 and 2.

Over mountainous land; through heavy timber and scatteri
undergrowth.

Desc.

Sub.T.31 S.,R.3 W.-Continued. T.P., 1881.

Chains

15.00 Top of ridge ,500 ft.above cor.,bears N.80°E.and S.80°W.
Desc.

24.00 Leave timber,bears E.and W.

35.00 Bottom of hollow,200 ft.below ridge, course N.70°W.
Asc.

36.00 Enter heavy timber,bears E.and W.

40.00 Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the
ground,on rock,and surrounded by mound of stone,for $\frac{1}{2}$
sec.cor..mkd.on brass cap $\frac{1}{2}$ S 1 in E half;and S 2 in W
half;from which

A pinon pine,16 ins.dia.,bears S.20°E.,6 lks.

dist..mkd. $\frac{1}{2}$ S 1 B T. ✓

A pinon pine,16 ins.dia.,bears N.25°W.,46 lks.

dist..mkd. $\frac{1}{2}$ S 2 B T.

43.00 Top of ridge,250 ft.above hollow,bears E.and W.

Desc.

57.00 Bottom of hollow ,80 ft below ridge,course N.60°W.

Asc.

65.58 Intersect 6th Standard parallel South,17.70 chs.N.89°36'
E.,of the standard cor.of secs.35 and 36,heretofore
described.

Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the
ground,for closing cor.of secs.1 and 2,mkd.on brass cap

C C T 30 S R 3 W S 35 S 36 in N half .

R 3 W S 1 in SE.;and

T 31 S S 2 in SW.quadrants;from which

A pinon pine,5 ins.dia.,bears S.20°E.,84 lks.

dist..mkd.T 31 S R 3 W S 1 B T. ✓

A pinon pine,6 ins.dia.,bears S.22°W.,68 lks.

dist..mkd.T 31 S R 3 W S 2 B T. ✓

Land,mountainous ,steep and rough.

Timber,cedar and pinon pine.

Soil,clay and gravelly;2nd rate.18 ins.deep.subsoil rock

Undergrowth,oak and sage brush.

Good grass.

Sub.T.31 S.,R.3 W.-Continued. P.M., July 29, 1911

Chains

Mountainous or heavily timbered land, 65.58 chs.
July 29, 1911: At this cor. I set off 18°54'N., on the decl.
arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the
meridian, the resulting lat. is 38°09'N., which is the
proper lat. nearly.

July 29, 1911..

J. Stewart

U.S. Transitman.

Subvey commenced July 24, 1911, and executed with a W. and
L.E. Gurley Explorer's transit, No. 957, with solar attachment.

The horizontal limb is provided with two double verniers
placed opposite to each other, reading to single minutes
of arc; which is also the least count of the verniers of the
declination arcs.

The instrument was examined, tested on the true meridian at
Salt Lake City, found correct, and was approved by the
surveyor general for Utah, on Mar. 28, 1911.

I examine the adjustments of the instrument and correct
the level and collimation errors; then, to test the solar
apparatus by comparing its indications resulting from
solar observations made during p.m., and a.m. hours with
a meridian established by Polaris observation, I proceed
as follows:

At the cor. of secs. 2, 3, 34, and 35, on S. bdy. of Tp., latitude
38°04'17"N., longitude 112°14'36"W., I set off 38°04'N., on
the lat. arc; 19°59'N., on the decl. arc; and at 4 h 6 m a.m.
l.m.t., I determine the meridian with the solar, at the cor.
and mark a point thereof on a stone firmly set in the
ground, 5.00 chs. N. of the cor.

At 11 h 25 m p.m., l.m.t., I observe Polaris at eastern
elongation in accordance with the Manual and mark a point
in the line thus determined by a tack driven in a wooden

Sub.T.31 S.,R.3 W.-Continued. S.P.,S. T. 1911

Chains

plug set in the ground, 5.00 chs. N. of the cor.

July 24, 1911.

July 25, 1911: At 6 h 40 m a.m., l.m.t., I lay off the azimuth of Polaris $1^{\circ}29'$ to the west and mark a point in the meridian thus determined by cutting a small groove in the stone already set 5.00 chs. N. of the cor.; this mark falls 0.36 ins. east of the meridian established by the solar.

At 8 h 6 m a.m., l.m.t., I set off $38^{\circ}04'N.$, on the lat. arc; and $19^{\circ}50'N.$, on the decl. arc; and mark the meridian determined ^{with} by the solar, by a cross on the stone already set 5.00 chs. N. of the cor.; this mark falls 0.32 ins. east of the meridian established by Polaris observation. The solar apparatus by p.m. and a.m. observations, defines positions for meridians respectively about $0'18''$ west and $0'17''$ east of the meridian established by Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the meridian at 8 h 30 m a.m., is $N.16^{\circ}05'W.$, the angle thus determined gives the mag. decl. $16^{\circ}05'E.$

From the cor. of secs. 2, 3, 34 and 35, on S. bdy. of Tp., heretofore described, I run $N.0^{\circ}01'W.$, bet. secs. 34 and 35.

Over mountainous land; through heavy timber and dense undergrowth.

Desc.

9.25 Bottom of hollow, 100 ft. below sec. cor., course NE.

Note: There is a small spring 3.00 chs. SW. of this point. The water sinks before it reaches the line.

Asc.

29.50 Top of ridge, 100 ft. above hollow, bears NE and SW.

Sub.T.31 S.,R.3 W.-Continued.

Chains	Desc.
40.00	<p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 34 in W half and S 35 in E half; from which</p> <p>An aspen, 5 ins. dia., bears S.40°E., 14 lks. dist. mkd. $\frac{1}{4}$ S 35 B T.</p> <p>An aspen, 4 ins. dia., bears S.66°W., 9 lks. dist. mkd. $\frac{1}{4}$ S 34 B T.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, mkd. on brass cap</p> <p>T 31 S S 27 in NW. R 3 W S 26 in NE. S 35 in SE.; and S 34 in SW. quadrants; from which</p> <p>A fir, 12 ins. dia., bears N.7°E., 26 lks. dist. mkd. T 31 S R 3 W S 26 B T.</p> <p>A fir, 6 ins. dia., bears S.62°E., 35 lks. dist. mkd. T 31 S R 3 W S 35 B T.</p> <p>A fir, 5 ins. dia., bears S.46°W., 27 lks. dist. mkd. T 31 S R 3 W S 34 B T.</p> <p>A fir, 6 ins. dia., bears N.68°W., 53 lks. dist. mkd. T 31 S R 3 W S 27 B T.</p>
	<p>Land, mountainous and high.</p> <p>Soil, sandy loam about 2 ft. deep. subsoil, clay and gravel.</p> <p>Timber, pine and aspen.</p> <p>Undergrowth, sage and deer brush.</p> <p>Good grass for grazing.</p> <p>Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.</p> <p>July 25, 1911: At this cor. I set off 19°48' N., on the decl. arc; and at 0 h 6 m p.m. l.m.t., I observe the sun on the meridian, the resulting lat. is 38°05' N., which is the proper lat. nearly.</p> <p>East, on a random line bet. secs. 26 and 35.</p>

Sub.T.31 S.,R.3 W.-Continued.

- Chains
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 79.98 Intersect N. and S. line, at the cor. of secs. 25, 26, 35, and 36.
- Thence I run
West, on a true line bet. secs. 26 and 35.
- Over mountainous land; through heavy timber and scattering undergrowth. Asc.
- 14.00 Top of ridge, 125 ft. above cor., bears NE and SW. Desc.
- 28.50 Leave timber, bears N. and S.
- 30.00 Bottom of hollow, 140 ft. below ridge, course N.
Asc.
- 39.99 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 26 in N half and S 35 in S half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
- 44.00 Enter heavy timber, bears N. and S.
- 56.00 Top of ridge, 150 ft. above hollow, bears N. and S.
Desc.
- 60.00 Leave timber, bears N. and S.
- 71.75 Bottom of hollow, 150 ft. below ridge, course N.
Asc. through heavy aspen and pine timber.
- 76.40 Top of ridge, 60 ft. above hollow, bears N. and S.
Desc.
- 79.98 The cor. of secs. 26, 27, 34, and 35, 75 ft. below ridge.
Land, high rolling mountains.
- Soil, rich sandy loam about 2 ft. deep, subsoil, gravel.
Timber, pine and aspen.
Undergrowth, deep brush.
Good grass for grazing.
Mountainous or heavily timbered land, 79.98 chs.
- July 25, 1911.
- July 26, 1911: At 7 h 6 m a.m., l.m.t., I set off $38^{\circ}05'N.$, on the lat. arc; $19^{\circ}38'N.$, on the decl. arc; and determine a

Sub.T.31 S.,R.3 W.-Continued.

Chains

meridian with the solar, at the cor. of secs. 26, 27, 34, and 35.

Thence

I run N.0°01'W., bet. secs. 26 and 27.

Over mountainous land; through heavy timber and dense undergrowth.

Desc. abruptly.

10.00 Bottom of hollow, 200 ft. below cor., course NW.

Leave timber, bears NW and SE.

Asc.

17.25 Asc. more abruptly over ledges, bears NW and SE.

18.10 Top of ridge, 200 ft. above hollow, bears NW and SE.

Enter heavy timber, bears NW and SE.

Desc. abruptly.

37.30 Bottom of hollow, 700 ft. below ridge, course NW.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on solid rock, and surrounded by mound of stone,

for 1/2 sec. cor. mkd. on brass cap 1/2 S 27 in W half and S 26 in E half; from which

A mahogany, 12 ins. dia., bears N.80°E., 35 lks.

dist. mkd. 1/2 S 26 B T.

A mahogany, 5 ins. dia., bears N.65°W., 60 lks.

dist. mkd. 1/2 S 27 B T.

61.30 Top of ridge, 150 ft. above hollow, bears N.60°W. and S.60°E.

Desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 22, 23, 26, and 27, mkd. on brass cap

T 31 S S 22 in NW.

R 3 W S 23 in NE.

S 26 in SE.; and

S 27 in SW. quadrants; from which

An aspen, 4 ins. dia., bears N.48°E., 4 lks.

dist. mkd. T 31 S R 3 W S 23 B T.

An aspen, 5 ins. dia., bears S.10°E., 3 lks.

dist. mkd. T 31 S R 3 W S 26 B T.

Sub.T.31 S.,R.3 W.-Continued.

Chains

An aspen, 5 ins. dia., bears S. 60° W., 17 lks.

dist. mkd. T 31 S R 3 W S 27 B T. ✓

An aspen, 4 ins. dia., bears N. 22° W., 6 lks.

dist. mkd. T 31 S R 3 W S 22 B T. ✓

Land, mountainous and rough.

Soil, red sand and rocky, 2nd rate. 1 to 2 ft. deep subsoil, rock.

Timber, pine and aspen.

Undergrowth, mahogany, oak, deer brush, and chokecherry.

Good grass.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

July 26, 1911: At this cor. I set off 19° 35' N., on the decl. arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 06' N., which is the proper lat. nearly.

East, on a random line bet. secs. 23 and 26.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.02 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 23, 24, 25, and 26.

Thence I run

N. 89° 58' W., on a true line bet. secs. 23 and 26.

Over mountainous land; through scattering timber.

Desc.

7.00 Bottom of hollow, 50 ft. below cor., course N.

Asc.

30.70 Top of ridge, 150 ft. above hollow, bears N. and S.

Desc.

39.70 Bottom of hollow, 40 ft. below ridge, course N.

Asc.

40.01 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 23 in N half and S 26 in S half; dig pits, 18x18x12 ins. E: and W. of post

Chains
 .3 ft.dist.;and raise,a mound of earth,3½ ft.base,1½ ft.
 high,N.of cor.
 45.70 Top of ridge,50 ft.above hollow,bears N.and S.
 Desc.over ledges.
 74.00 Leave timber,bears N.and S.
 78.00 Bottom of hollow,1500 ft.below ridge,course N.20°W.
 Enter heavy timber,bears N.20°W.and S.20°E.
 Asc.
 80.02 The cor.of secs.22,23,26, and 27.
 Land,mountainous and very rough.
 Timber,cedar,pinon,pine and aspen.
 Soil,sandy loam on E.45.70 chs. and rocky on balance
 of mile.
 Undergrowth,deer brush and yellow brush.
 Good grass for grazing.
 Mountainous or heavily timbered land,or land covered
 with dense undergrowth,80.02 chs.

July 26,1911.

July 27,1911:At 7 h 6 m a.m.,l.m.t.,I set off 38°06'N.,
 on the lat.arc;19°25'N.,on the decl.arc;and determine
 a meridian with the solar,at the cor.of secs.22,23,26, and
 27.
 Thence I run
 N.0°01'W.,bet.secs.22 and 23.

Over mountainous land;through heavy timber,and dense
undergrowth.

Desc.

3.00 Bottom of hollow,30 ft.below cor,course NW.

Asc.

20.00 Top of ridge,30 ft.above hollow,bears NW and SE.

Desc.

28.00 Bottom of hollow,70 ft.below ridge,course N.60°W.

Asc.

37.00 Top of ridge,200 ft.above hollow,bears N.80°E.and S.80°W

Sub.T.31 S.,R.3 W.-Continued.

Chains Desc.

- 10.00 Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor..mkd. on brass cap $\frac{1}{4}$ S 22 in W half and S 23 in E half; from which
- A pinon pine, 14 ins. dia., bears N.60°E., 8 lks.
dist..mkd. $\frac{1}{4}$ S 23 B T.
- A pinon pine, 7 ins. dia., bears S.43°W., 12 lks.
dist..mkd. $\frac{1}{4}$ S 22 B T.
- 45.00 Bottom of hollow, 40 ft. below ridge, course W.
- Asc.
- 49.00 Top of ridge, 80 ft. above hollow, bears N.70°W. and S.70°E.
- Desc.
- 55.00 Bottom of hollow, 120 ft. below ridge, course N.70°W.
- Asc.
- 66.00 Top of ridge, 70 ft. above hollow, bears N.80°W. and S.80°E.
- Desc.
- 70.00 Bottom of hollow, 60 ft. below ridge, course N.80°W.
- Asc.
- 79.00 Top of ridge, 80 ft. above hollow, bears E. and W.
- Desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground, on rock, and surrounded by mound of stone, for cor. of secs. 14, 15, 22, and 23, mkd. on brass cap
- T 31 S S 15 in NW.
R 3 W S 14 in NE.
S 23 in SE.; and
S 22 in SW. quadrants; from which
- A balsam, 14 ins. dia., bears N.62°30'E., 35 lks.
dist..mkd. T 31 S R 3 W S 14 B T.
- A cedar, 10 ins. dia., bears S.74°15'E., 43 lks.
dist..mkd. T 31 S R 3 W S 23 B T.
- A cedar, 8 ins. dia., bears S.87°W., 70 lks.
dist..mkd. T 31 S R 3 W S 22 B T.
- A cedar, 10 ins. dia., bears N.82°W., 85 lks.
dist..mkd. T 31 S R 3 W S 15 B T.

Land, mountainous.

Chains

Soil, gravelly and rocky; 2nd and 4th rate. Subsoil, gravel
Timber, cedar, pinon pine, aspen and pine.

Undergrowth, deer brush and oak.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 80.00 chs.

July 27, 1911: At this cor. I set off $19^{\circ}22'N.$, on the decl.
arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the
meridian the resulting lat. is $38^{\circ}07'N.$, which is the
proper lat. nearly.

S. $89^{\circ}58'E.$, on a random line bet. secs. 14 and 23.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.00 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 13, 14,
23, and 24.

"hence I run
West, on a true line bet. secs. 14 and 23.

Over mountainous land; through heavy timber and dense
undergrowth.

Asc.

.50 Top of ridge, 10 ft. above cor., bears N. and S.

Desc.

4.50 Bottom of hollow, 200 ft. below ridge, course N. $20^{\circ}E.$

Asc.

20.50 Top of ridge, 700 ft. above hollow, bears N. $20^{\circ}E.$ and S. $20^{\circ}W.$

Desc.

22.15 Top of perpendicular ledge 300 ft. high, bears N. $20^{\circ}E.$ and
S. $20^{\circ}W.$

Note: The $\frac{1}{2}$ sec. cor. will fall on precipitous ledges,
therefore at this point I

Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the
ground, on rock, and surrounded by mound of stone, for
witness cor. to $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ 31 S R 3 W
W C $\frac{1}{2}$ S 14 in N half and S 23 in S half; from which

A red pine, 4 ins. dia., bears N. $80^{\circ}E.$, 30 lks.

Sub.T.31 S.,R.3 W.-Continued.

Chains
 29.00 dist.mkd.W C $\frac{1}{2}$ S 14 B T.
 A red pine, 7 ins.dia., bears S. 70° E., 23 lks.
 dist.mkd.W C $\frac{1}{2}$ S 23 B T.
 Desc.abruptly over ledges.
 29.00 Bottom of steep gulch, 300 ft. below foot of ledge, course SW.
 Asc. over ledges.
 38.00 Top of ridge, 100 ft. above hollow, bears N. and S.
 Desc.abruptly over ledges.
 40.00 Falls on steep ledges, cor. cannot be set.
 46.00 Bottom of same gulch, 600 ft. below ridge, course NW.
 Asc.abruptly over ledges.
 58.00 Leave ledges, bears NW and SE.
 64.00 Top of ridge, 200 ft. above gulch, bears NW and SE.
 Desc.
 80.00 The cor. of secs. 14, 15, 22, and 23.
 Land, mountainous and very rough.
 Soil, sandy loam on E. 22. 15 chs. 2 ft. deep. subsoil, clay.
 on W. 57. 85 chs. soil is very rocky and steep.
 Timber, cedar, pinon pine, red pine, balsam, and aspen.
 Undergrowth, oak, deer, and sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
 July 27, 1911.
 July 28, 1911: At 7 h 6 m a.m., l.m.t., I set off 38° 07' N., on the lat. arc; 19° 12' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 14, 15, 22, and 23.
 Thence I run a line, N. 0° 01' W., bet. secs. 14 and 15.
 Over mountainous land; through heavy timber and scattering undergrowth.
 Desc.

Chains	
3.40	Creek, 3 lks. wide, 1 in. deep, in bottom of hollow, 100 ft.
	below cor., course, N. 70° W.
	Asc.
14.80	Top of spur, 150 ft. above hollow; bears E. and W.
	Desc.
19.00	Head of hollow, 40 ft. below ridge, course NW.
	Asc.
24.00	Top of ridge, 50 ft. above hollow; bears N. 10° W. and S. 10° E.
	Desc.
33.50	Creek, 2 lks. wide, 1 in. deep; in canon, 150 ft. below ridge,
	course W.
	Asc.
37.00	Top of ridge, 125 ft. above hollow; bears E. and W.
	Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the
	ground, in rock, and surrounded by mound of stone, for $\frac{1}{2}$
	sec. cor. mkd. on brass cap $\frac{1}{2}$ S 15 in W. half and S 14 in E
	half; from which
	A pinon pine, 10 ins. dia., bears N. 23° E., 26 lks.
	dist. mkd. $\frac{1}{2}$ S 14 B. T.
	A pinon pine, 7 ins. dia., bears S. 15° W., 20 lks.
	dist. mkd. $\frac{1}{2}$ S 15 B. T.
47.75	Bottom of hollow, 100 ft. below ridge, course SW.
	Asc.
58.00	Top of ridge, 200 ft. above hollow, bears NE and SW.
	Desc.
69.70	Bottom of hollow, 75 ft. below ridge, course W.
	Asc.
80.00	Top of ridge, 200 ft. above hollow, bears N. 80° W. and S. 80°
	E.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
	ground, for cor. of secs. 10, 11, 14, and 15, mkd. on brass cap
	T 31 S S 10 in NW.
	R 3 W S 11 in NE.
	S 14 in SE.; and
	S 15 in SW. quadrants; from which

Sub. T. 31 S., R. 3 W.- Continued

Chains

A pinon pine, 10 ins. dia., bears N. 62° E., 28 lks.
dist., mkd. T 31 S R 3 W S 11 B T ✓

A pinon pine, 7 ins. dia., bears S. 13° E., 20 lks.
dist., mkd. T 31 S R 3 W S 14 B T ✓

A pinon pine, 8 ins. dia., bears S. 30° W., 12 lks.
dist., mkd. T 31 S R 3 W S 15 B T

A pinon pine, 12 ins. dia., bears N. 42° W., 18 lks.
dist., mkd. T 31 S R 3 W S 10 B T ✓

Land, rough and mountainous.

Volcanic and volcanic conglomerate formation.

Soil, red sand and rocky; 2nd and 4th rate.

Timber, cedar, mahogany, aspen and pine.

Undergrowth, sage brush.

Mountainous or heavily timbered land, 80.00 chs.

July 28, 1911: At this cor. I set off 19° 08' N. on the decl. arc; and at 0h 6m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 08' N., which is the proper lat. nearly. ✓

East on a random line bet. secs. 11 and 14

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.08 Intersect N. and S. line 5 lks. S. of the cor. of secs. 11, 12, 13 and 14.

Thence I run

S. 89° 58' W. on a true line bet. secs. 11 and 14

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

22.00 Top of ridge, 500 ft. above cor., bears N. 30° W. and S. 30° E. Desc.

34.26 Top of ledges, bears N. 30° W. and S. 30° E.

Note:- The $\frac{1}{4}$ sec. cor. will fall on ledges; therefore at this point I

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the

Sub. T. 31 S., R. 3 W. - Continued

- Chains
 ground, for witness cor. to $\frac{1}{4}$ sec. cor., mkd. on brass cap T
 31 S R 3 W W C $\frac{1}{4}$ S 11 in W half and S 14 in S half; and
 raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
 Desc. abruptly over ledges.
- 40.04 Point for $\frac{1}{4}$ sec. cor. falls on ledges, cor. cannot be set.
- 52.00 Bottom of canon, 700 ft. below ridge, course N. 60° W.
 Asc. over ledges.
- 73.00 Top of ridge, 300 ft. above canon, bears N. 60° W. and S. 60° E.
 Leave ledges.
 Desc.
- 80.08 The cor. of secs. 10, 11, 14 and 15. ✓
 Land, mountainous.
 Soil, gravelly and rocky; 2nd and 4th rate.
 Timber, cedar, pine, aspen, and pinon pine.
 Undergrowth, oak and sage brush.
 Good grass.
 Mountainous or heavily timbered land, 80.08 chs.
 July 28, 1911
-
- July 29; 1911: At 7h 6m a.m., 1.m.t., I set off 38° 08' N.
 on the lat. arc; 18° 58' N. on the decl. arc; and determine
 a meridian with the solar at the cor. of secs. 10, 11, 14,
 and 15.
 Thence I run
 N. 0° 01' W., bet. secs. 10 and 11.
 Over mountainous land; through heavy timber.
 Desc.
- 9.90 Bottom of hollow, 150 ft. below cor., course N. 70° W.
 Asc.
- 11.00 Top of ridge, 30 ft. above hollow, bears N. 75° W., and S.
 75° E. Desc.
- 12.00 Bottom of hollow, 120 ft. below ridge, course N. 80° W.
 Asc.
- 20.00 Top of ridge, 140 ft. above hollow, bears N. 70° W. and S.
 70° E. Desc.

Sub.T.31 S.,R.3 W.-Continued..

Chains	
32.00	Bottom of hollow, 200 ft. below ridge, course N. 60° W. Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 10 in W half and S 11 in E half; from which A cedar, 30 ins. dia., bears S. 88° E., 10 lks. dist. mkd. $\frac{1}{2}$ S 11 B T.
50.00	A pinon pine, 7 ins. dia., bears N. 20° W., 17 lks. dist. mkd. $\frac{1}{2}$ S 10 B T.
50.00	Top of ridge, 300 ft. above hollow, bears N. 70° W. and S. 70° E. Desc.
60.50	Bottom of hollow, 400 ft. below ridge, course W. Asc.
70.60	Top of ridge, 300 ft. above hollow, bears N. 65° W. and S. 65° E. Desc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 2, 3, 10, and 11, mkd. on brass cap T 31 S S 3 in NW. R 3 W S 2 in NE. S 11 in SE.; and S 10 in SW. quadrants; from which A pinon pine, 5 ins. dia., bears N. 30° E., 30 lks. dist. mkd. T 31 S R 3 W S 2 B T. A pinon pine, 7 ins. dia., bears S. 45° E., 15 lks. dist. mkd. T 31 S R 3 W S 11 B T. A pinon pine, 6 ins. dia., bears S. 60° W., 55 lks. dist. mkd. T 31 S R 3 W S 10 B T. A pinon pine, 6 ins. dia., bears N. 33° W., 35 lks. dist. mkd. T 31 S R 3 W S 3 B T.
	Land, mountainous Soil, gravelly; 3rd rate. 1 ft. deep to 2 ft. deep. Timber, pine, aspen and red pine. Undergrowth, oak and sage brush. Good grass for grazing. Mountainous land, or heavily timbered land, 80.00 chs. July 29, 1911 : At this cor. I set off 18° 54' N., on the

Chains

decl.arc;and at 0 h 6 m p.m.,l.m.t.,I observe the sun
on the meridian the resulting lat.is 38°09'N.,which is
the proper lat.nearly.

Thence I run
N.89°58'E.,on a random line bet,secs.2 and 11.

40.00 Set temp. 1/4 sec.cor.

80.12 Intersect N.and S.line,5 lks.N.of the cor.of secs.1,2,11,
and 12.

Thence I run
West,on a true line bet.secs.2 and 11.
Over mountainous land;through heavy timber and scatterin
undergrowth.

Desc.

7.00 Bottom of hollow,40 ft.below cor.,course S.

Asc.

10.00 Top of ridge,40 ft.above hollow,bears N.and S.

Desc.

31.00 Bottom of canon,600 ft.below ridge,course N.30°W.

Creek,4 lks.wide,3 ins.deep,in bottom.

Asc.

35.00 Top of ridge,100 ft.above canon,bears N.60°E.and S.60°W.

Desc.

37.00 Bottom of hollow,30 ft.below ridge,course N.70°E.

Asc.

40.06 Set an iron post;3 ft.long,1 in.in dia.,14 ins.in the
ground;on solid rock,and surrounded by mound of stone,
for 1/4 sec.cor..mkd.on brass cap 1/2 S 2 in N half
and S 11 in S half;from which

AA mahogany,6 ins.dia.,bears N.10°W.,10 lks.

dist..mkd.1/4 S 2 B T.

A pinon pine,14 ins.dia.,bears S.36°W.,48 lks.

dist..mkd.1/4 S 11 B T.

46.00 Top of abrupt ascent,bears N.and S.

46.60 Top of ridge,700 ft.above hollow,bears N.and S.

Desc.

Chains

49.50 Bottom of hollow, 200 ft. below ridge, course NE.
Asc.

55.00 Top of ridge, 30 ft. above hollow, bears N. 30° E. and S. 30° W.
Desc. abruptly.

80.12 The cor. of secs. 2, 3, 10, and 11. 700 ft. below ridge,
Land, mountainous .

Soil, gravelly ; 2nd rate subsoil, gravel and rock

Timber, cedar and pinon pine, and mahogany.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavilt timbered land, 80.12 chs.

July 29, 1911

John Stewart

U. S. Transitman.

July 29, 1911 At 2 h 6 m p.m., l.m.t., I set off 38° 09' N.,
on the lat. arc; and 18° 53' N., on the decl. arc; and determine
a meridian with the solar, at the cor. of secs. 2, 3, 10,
and 11.

Thence I run,

N. 0° 01' W., on a true line bet. secs. 2 and 3.

Over mountainous land; through heavy timber and scattering
undergrowth.

Desc.

4.00 Bottom of hollow, 200 ft. below ridge, course S. 85° W.,

Asc.

5.00 Leave timber, bears E. and W.

17.00 Enter heavy timber, bears E. and W.

29.00 Top of ridge, 300 ft. above hollow, bears N. 60° E. and S. 60° W.
Desc.

35.00 Bottom of swale, 50 ft. below ridge, course SW.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S $\frac{1}{2}$ in W half

Sub.T.31 S.,R.3 W.-Continued.

Chains

and S 2 in E half; from which

A pinon pine, 20 ins. dia., bears S. 54° E., 155 lks.
dist. .mkd. $\frac{1}{2}$ S 2 B T.

A pinon pine, 18 ins. dia., bears S. 4° W., 260 lks.
dist. .mkd. $\frac{1}{2}$ S 3 B T.

45.00 Top of ridge, 150 ft. above hollow, bears NE and SW. Desc.

64.30 Bottom of hollow, 100 ft. below ridge, course NW. Asc.

65.39 Intersect 6th Standard Parallel South, 17.11 chs. N 89° 59' E, of

Standard cor. of secs. 34 and 35, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
ground, for closing cor. of secs. 2 and 3, mkd. on brass cap

C C T 30 S R 3 W S 34 S 35 in N half.

R 3 W S 2 in SE; and

T 31 S S 3 in SW quadrants; from which

A cedar, 8 ins. dia., bears S. 80° E., 12 lks.
dist. .mkd. T 31 S R 3 W S 2 B T.

A pinon pine, 4 ins. dia., bears S. 60° W., 58 lks.
dist. .mkd. T 31 S R 3 W S 3 B T.

Land, mountainous .

Soil, gravelly ; 3rd rate. 1 to 2 ft. deep. subsoil gravel
and rock.

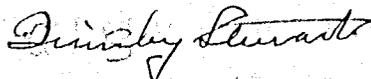
Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, 65.39 chs.

July 29, 1911. ✓



U.S. Transitman.

July 31, 1911: At 7 h 6 m a.m., l.m.t., I set off 38° 04' N.,
on the lat. arc; 18° 29' N., on the decl. arc; and determine
a meridian with the solar, at the cor. of secs. 3, 4, 33,
and 34, on S. bdy. of Tp. heretofore described.

Thence I run

N. 0° 02' W., bet. secs. 33 and 34.

Sub.T.31 S.,R.3 W.-Continued.

Chains	Over mountainous land; through heavy timber and scattering undergrowth.
1.50	Asc. Leave timber, bears E. and W. Enter dense undergrowth, bears E. and W.
13.00	Top of ridge, 100 ft. above bot., bears E. and W. Desc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 33 in W half and S 34 in E half; from which
	An aspen, 4 ins. dia., bears N. 47° E., 110 lks.
	dist. mkd. $\frac{1}{2}$ S 34 B T.
	An aspen, 4 ins. dia., bears N. 54° W., 240 lks.
	dist. mkd. $\frac{1}{2}$ S 33 B T.
69.00	Creek, 3 lks. wide, 2 ins. deep, in bottom of canon, 350 ft. below ridge, course NW. Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 27, 28, 33, and 34, mkd. on brass cap
	T 31 S S 28 in NW.
	R 3 W S 27 in NE.
	S 34 in SE.; and
	S 33 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Land, mountainous.
	Soil, rich sandy and gravelly loam; 2nd rate. from 2 ft. to 4 ft. deep.
	Timber, cedar and mahogany, and aspen.
	Undergrowth, service berry and deer brush.
	Good grass for grazing.
	Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.
	July 31, 1911: At the noon hour the sky is overcast and solar observations are impossible.

Sub.T.31 S.,R:3 W.-Continued...

- Chains East, on a random line bet. secs. 27 and 34.
- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.03 Intersect N. and S. line, 2 lks. S. of the cor. of secs. 26, 27, 34 and 35.
Thence I run
S. $89^{\circ}59'W.$, on a true line bet. secs. 27, and 34.
Over mountainous land; through heavy timber and scattering undergrowth.
Des. abruptly.
- 38.65 Bottom of hollow, 800 ft. below cor., course N. $10^{\circ}W.$
Asc.
- 40.01 $\frac{1}{2}$ Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground; for $\frac{1}{4}$ sec. cor.: mkd. on brass cap $\frac{1}{4}$ S 27 in N half and S 34 in S half; from which
An aspen, 4 ins. dia., bears N. $25^{\circ}E.$, 40 lks.
dist. mkd. $\frac{1}{4}$ S 27 B. T.
An aspen, 6 ins. dia., bears S. $16^{\circ}30'E.$, 25 lks.
dist. mkd. $\frac{1}{2}$ S 34 B. T.
- 45.00 Top of ridge, 200 ft. above hollow, bears N. and S.
Desc.
- 70.15 Wood road, bears N. and S.
Leave timber, bears N. and S.
Enter dense undergrowth, bears N. and S.
- 78.70 Wood road, bears N. and S.
- 80.03 The cor. of secs. 27, 28, 33, and 34. 500 ft. below ridge, land, mountainous
Soil, sandy and gravelly from 1 to 3 ft. deep. subsoil gravel and rock.
Timber, pine, aspen, and mahogany.
Undergrowth, deer brush, choke cherry and service berry brush.
Good grass for grazing.
Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.03 chs.

July 31, 1911.

Sub.T.31 S.,R.3 W.-Continued.

Chains

August 1,1911:At 7 h 6 m a.m.,l.m.t.,I set off 38°05'N. on the lat.arc;18°15'N.,on the decl.arc;and determine a meridian with the solar,at the cor.of secs.27,28,33,and 34.

Thence I run

N.0°02'W.,bet.secs.27 and 28.

Over mountainous land;through scattering timber and dense undergrowth.

Asc.

3.00 Wood road,bears NW and SE.

8.75 Wood road,bears N.60°E.and S.60°W.

13.30 Top of ridge,40 ft.above cor.,bears E.and W.

Enter heavy timber,bears E.and W.

Desc.

17.00 Wood road,bears E.and W.

40.00 Bottom of canon,200 ft.below ridge,course NW. Point for 1/4 sec.cor., cor.not set. Asc.

40.30 Nearest safe place for cor.

Set an iron post,3 ft.long,1 in.in dia., 26 ins.in the ground,for witness cor to 1/4 sec.cor.,mkd.on brass cap

T 31 S R 3 W in N half W C 1/2 S 28 in W half and S 27 in E half;from which

A pinon pine,10 ins.dia.,bears S.65°E.,26 lks.

dist..mkd.W C 1/2 S 27 B T.

An aspen,8 ins.dia.,bears S:23°W.,30 lks.

dist..mkd.W C 1/2 S 28 B T.

43.20 Top of ridge,100 ft.above hollow,bears E.and W.

Desc.

48.90 Road,bears N.30°W.and S.30°E.

50.50 Bottom of canon,125 ft.below ridge,course NW.

Asc.

63.00 Top of ridge,200 ft.above hollow,bears NW and SE.

Desc.

Leave heavy and enter scattering timber. bears NW and SE.

80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.21,22,27,and 28,mkd.on brass cap

Sub.T.31 S.,R.3 W.-Continued.

Chains

T 31 S S 21 in NW.

R 3 W S 22 in NE.

S 27 in SE.;and

✓ S 28 in SW.quadrants;from which

A cedar,8 ins.dia.,bears N.11°45'E.,160 lks.

dist..mkd.T 31 S R 3 W S 22 B T.

A pinon pine,6 ins.dia.,bears S.67°E.,92 lks.

dist..mkd.T 31 S R 3 W S 27 B T.

A fir 4 ins.dia. bears S.59°W.,32 lks.

dist..mkd.T 31 S R 3 W S 28 B T.

A pinon pine,6 ins.dia.,bears N.45°30'W.,137 lk

dist..mkd.T 31 S R 3 W S 21 B T.

Land,mountainous .

Soil,red sand and rocky;2nd and 3rd rate.

Timber,pinon pine,cedar,aspen,red pine,and mahogany.

Undergrowth,sage and service berry.

Mountainous or heavily timbered land,or land covered

with dense undergrowth,80.00 chs.

August 1,1911:At this cor.I set off 18°11'N.,on the

decl.arc;and at 0 h 6 m p.m. l.m.t.,I observe the sun

on the meridian,the resulting lat.is 38°06'N.,which

is the proper lat.nearly

N.89°59'E.,on a random line bet.secs.22 and 27.

40.00 Set temp.¼ sec.cor.

80.00 Intersect N.and S.line,2 lks.N.of the cor.of secs.22,23,
26.and 27.

Thence I run

West,on a true line bet.secs.22 and 27.

Over mountainous land;through heavy timber and scatterin
undergrowth.

Asc.

8.00 Top of rocky ridge,150 ft.above cor.,bears H.and S.

Desc.

15.00 Bottom of hollow,75 ft.below ridge,course N.

Asc.

Sub.T.31 S.,R.3 W.-Continued. G.P., S. 18.7.11

Chains

22.00 Top of ridge, 150 ft. above hollow, bears N. and S. 100° 06' N.
 Desc.

35.30 Top of ridge, and ledge, 50 ft. below ridge, bears NW and SE
 Desc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 2 1/2 ins. in the
 ground, for 1/4 sec. cor. mkd. on brass cap 1/4 S 22° in N half
 and S 27° in S half; from which
 A pinon pine, 6 ins. dia., bears N. 72° E., 141 lks.
 A pinon pine, 5 ins. dia., bears S. 65° W., 7 lks.
 A pinon pine, 5 ins. dia., bears S. 27° W., 141 lks.
 Leave heavy and enter scattering timber, bears NW and SE

65.00 Bottom of hollow, 300 ft. below ridge, course N. 80° W.
 Asc. gradually.

80.00 The cor. of secs. 21, 22, 27, and 28.
 Land, mountainous.
 Soil, red sand and rocky; 2nd and 4th rate. from 1 to 3 ft
 deep.
 Timber, cedar, pinon pine, aspen, red pine, and mahogany.
 Undergrowth, sage brush, and service berry.
 Good grass.
 Mountainous or heavily timbered land, or land covered with
 dense undergrowth, 80.00 chs.

August 1, 1911.

August 2, 1911: At 7 h 6 m a.m., l.m.t., I set off 38° 06' N.
 on the lat. arc; 17° 59' N., on the decl. arc; and determine a
 meridian with the solar, at the cor. of secs. 21, 22, and
 27, and 28.
 Hence I run
 N. 0° 02' W., bet. secs. 21 and 22.
 Over mountainous land, through heavy timber and scattering
 undergrowth.
 Desc.

Sub.T.31 S.,R.3 W.-Continued. U.S.G. G.P.O.

Chains	
1.50	Bottom of hollow, 80 ft. below cor., course SW. Asc.
6.50	Top of ridge, 100 ft. above hollow; bears N. 80° W. and S. 80° E. Desc.
16.50	Bottom of hollow, 70 ft. below ridge, course N. 60° W. Asc.
25.00	Top of ridge, 80 ft. above hollow, bears N. 80° E. and S. 80° W. Desc.
34.00	Bottom of hollow, 50 ft. below ridge, course N. 70° W. Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 21 in W half and S 22 in E half; from which A pinon pine, 24 ins. dia., bears N. 60° E., 40 lks. dist. mkd. $\frac{1}{4}$ S. 22, B.T. A pinon pine, 6 ins. in dia., bears N. 80° W., 55 lks. dist. mkd. $\frac{1}{4}$ S 21 B.T.
60.00	Top of ridge, 40 ft. above hollow, bears NW and S. 80° E. Desc.
76.00	Wash, 60 lks. wide, 8 ft. deep, course N. 80° W. Enter rolling valley land.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 15, 16, 21, and 22, mkd. on brass cap T 31 S S 16 in NW. R 3 W S 15 in NE. S 22 in SE.; and S 21 in SW. quadrant; from which A pinon pine, 8 ins. dia., bears N. 18° E., 33 lks. dist. mkd. T 31 S R 3 W S 15 B T. A pinon pine, 6 ins. dia., bears S. 40° E., 35 lks. dist. mkd. T 31 S R 3 W S 22 B T. A pinon pine, 6 ins. dia., bears S. 45° W., 40 lks. dist. mkd. T 31 S R 3 W S 21 B T. A pinon pine, 6 ins. dia., bears N. 86° W., 28 lks. dist. mkd. T 31 S R 3 W S 16 B T. Lqnd, mountainous and rolling valley.

Sub.T.31 S.,R.3 W.-Continued.

Chains

Soil, sandy and gravelly loam about 2 ft. deep. subsoil, clay and gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass

Mountainous or heavily timbered land, 80.00 chs.

August 2, 1911: At this cor. I set off $17^{\circ}56'N.$, on the decl. arc; and at 0 h. 6 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}07'N.$, which is the proper lat. nearly.

East, on a random line bet. secs. 15 and 22.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.96 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 14, 15, 22, and 23.

Thence I run

S. $89^{\circ}57'W.$, on a true line bet. secs. 15 and 22.

Over mountainous land; through scattering timber and dense undergrowth.

Desc.

8.00 Enter rolling valley land, bears N. and S.

8.00 Sheep dipping corral, bears N. 8.00 chs. dist.

39.98 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 15 in N half and S 22 in S half; from which

A pinon pine, 6 ins. dia., bears N. $52^{\circ}E.$, 102 lks. dist. mkd. $\frac{1}{2}$ S 15 B T.

A pinon pine, 4 ins. dia., bears S. $46^{\circ}E.$, 34 lks. dist. mkd. $\frac{1}{2}$ S 22 B T.

50.00 Wash, 20 lks. wide, 6 ft. deep, course NW.

Leave valley land and ascend.

55.00 Top of ridge, 40 ft. above wash, bears N.W. and SE.

Desc.

63.50 Wash, 30 lks. wide, 4 ft. deep, 75 ft. below ridge, course N. 30°

Sub.T.31 S.,R.3 W.-Continued.

Chains

Enter rolling valley, bears N.30°W. and S.30°E.

Enter heavy timber, bears N.30°W. and S.30°E.

79.96 The cor. of secs. 15, 16, 21, and 22. Mountainous and rolling valley. Soil, rocky and sandy; 3rd and 2nd rate. Subsoil, clay and hard pan. Timber, cedar, pinon pine, and mahogany. Undergrowth, sage, and oak brush. Good grass for grazing. Mountainous or heavily timbered land, or land covered with dense undergrowth, 79.96 chs.

August 2, 1911. At 7 h 6 m a.m., l.m.t., I set off 38° 07' N. on the lat. arc; 17° 43' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 15, 16, 21, and 22.

Thence I run N. 0° 02' W., bet. secs. 15 and 16.

Over rolling valley; through heavy timber and scattering undergrowth.

Desc.

25.50 Wash, 50 lks. wide, 5 ft. deep, course N. 80° W.

Desc.

25.60 Wood road, bears N. 80° W. and S. 80° E.

40.00 Set an iron posr, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/4 sec. cor. mkd. on brass cap 1/4 S 16 in W half and S 15 in E half; from which

A pinon pine, 5 ins. dia., bears S. 80° E., 44 lks. dist. mkd. 1/4 S 15 B T.

A pinon pine, 5 ins. dia., bears N. 25° W., 26 lks. dist. mkd. 1/4 S 16 B T.

48.50 Wash, 100 lks. wide, 8 ft. deep, course N. 70° W.

Leave valley, bears N. 70° W. and S. 70° E. Asc.

Sub.T.31 S.,R.3W.-Continued.

Chains	
60.00	Top of ridge, 30 ft. high, bears NW and SE. Desc.
72.50	Bottom of hollow, 30 ft. below ridge, course N.30°W. Asc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 9, 10, 15, and 16, mkd. on brass cap T 31 S S 9 in NW. R. 3 W S 10 in NE. S 15 in SE.; and S 16 in SW. quadrants; from which A pinon pine, 6 ins. dia., bears N.28°E., 95 lks. dist. mkd. T 31 S R 3 W S 10 B T. A pinon pine, 5 ins. dia., bears S.17°E., 100 lks. dist. mkd. T 31 S R 3 W S 15 B T. A pinon pine, 6 ins. dia., bears S.30°W., 85 lks. dist. mkd. T 31 S R 3 W S 16 B T. A pinon pine, 7 ins. dia., bears N.56°W., 65 lks., dist. mkd. T 31 S R 3 W S 9 B T. Land, mountainous and valley. Soil, sandy loam mixed with cobble rock; 2 ft. deep. Timber, cedar and pinon pine. Undergrowth, sage brush. Good grass Mountainous or heavily timbered land, 80.00 chs. August 3, 1911: At this cor.: I set off, 17°40'N., on the decl. arc; and at 0 h 6 m p.m.l.m.t., I observe the sun on the meridian the resulting lat. is 38°08'N., which is the proper lat. nearly. N.89°57'E., on a random line bet. secs. 10 and 15.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.94	Intersect N. and S. line, 10 lks. N. of the cor. of secs. 10, 11 14. and 15. Thence I run N.89°59'W., on a true line bet. secs. 10 and 15.

Sub.T.31 S.,R.3 W.-Continued...

Chains
 Over mountainous land; through heavy timber and scattering
 sage brush.
 Desc.
 34.00 Bottom of hollow, 200 ft. below top, course N. 80° W.
 Asc.
 37.00 Top of ridge, 40 ft. above hollow, bears N: 70° W. and S. 70° E
 Desc.
 39.97 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for 1/2 sec. cor., mkd. on brass cap 1/2 S 10 in N half
 and S 15 in S half; from which
 A pinon pine, 4 ins. dia., bears N. 28° W., 30 lks.
 dist. mkd. 1/2 S 10 B.T.
 A pinon pine, 5 ins. dia., bears S. 12° W., 26 lks.
 dist. mkd. 1/2 S 15 B.T.
 41.20 Bottom of hollow, 70 ft. below ridge, course N. 30° W.
 Asc.
 45.00 Top of ridge, 60 ft. above hollow, bears N. 70° W. and S. 70° E.
 Desc.
 57.50 Bottom of hollow, 80 ft. below ridge, course N. 20° W.
 Asc.
 61.50 Top of ridge, 150 ft. above hollow, bears NW and SE.
 Desc.
 74.00 Bottom of hollow, 200 ft. below ridge, course N. W.
 asc.
 78.40 Top of ridge, 40 ft. above hollow, bears N. and S.
 Desc.
 79.94 The cor. of secs. 9, 10, 15, and 16.
 Land, mountainous
 Soil, sandy and gravelly loam; 2 ft. to 3 ft. deep. 2nd and
 3rd rate. Subsoil, gravel and hard pan.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, 79.94 chs.

August 3, 1911.

Sub.T.31 S.,R.3 W.-Continued.

Chains	
	<p>August 4, 1911: At 7. ho 6 m (a.m., l.m.t., I set off 38°08' on the lat. arc; 17°28' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 9, 10, 15, and 16</p> <p>Thence I run, N. 0°02' W., bet. secs. 9 and 10.</p> <p>Over mountainous land; through heavy timber and scattering sage brush.</p> <p>Desc.</p>
6.50	<p>Bottom of hollow, 20 ft. below cor., course N. 30° W.</p> <p>Asc.</p>
16.50	<p>Road, bears N. 80° W. and S. 80° E.</p>
19.50	<p>Top of ridge, 80 ft. above hollow, bears E. and W.</p> <p>Desc.</p>
21.40	<p>Road, bears N. 70° E. and S. 70° W.</p>
25:00	<p>Bottom of hollow, 70 ft. below ridge, course W.</p> <p>Asc.</p>
29.00	<p>Wood road, bears N. 80° E. and S. 80° W.</p>
34.00	<p>Top of ridge, 85 ft. above hollow, bears N. 70° W. and S. 70° E.</p> <p>Desc.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 9 in W half and S 10 in E half; from which</p> <p>A pinon pine, 4 ins. dia., bears S. 25° E., 30 lks. dist. mkd. $\frac{1}{2}$ S 10, E T.</p> <p>A pinon pine, 8 ins. dia., bears S. 32° W., 26 lks. dist. mkd. $\frac{1}{2}$ S 9 B T.</p>
40.30	<p>Bottom of hollow, 100 ft. below ridge, course S. 80° W.</p> <p>Asc.</p>
45.00	<p>Top of ridge, 90 ft. above hollow, bears N. 80° W. and S. 80° E.</p> <p>Desc.</p>
49.50	<p>Bottom of hollow, 100 ft. below ridge, course N. 75° W.</p> <p>Asc.</p>
54.50	<p>Top of ridge, 80 ft. above hollow, bears E. and W.</p> <p>Desc.</p>
59.00	<p>Bottom of hollow, 75 ft. below ridge, course S. 80° W.</p> <p>Asc.</p>

Sub.T.31 S.,R.3 W.-Continued.

Chains

74.00 Top of ridge, 90 ft. above hollow, bears N. 80° W. and S. 80° E.

Desc.

80.00 Set an iron post, 5 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 3, 4, 9, and 10, mkd. on brass cap

T 31 S S 4 in NW.

R 3 W S 3 in NE.

S 10 in SE.; and

S 9 in SW. quadrants; from which

A pinon pine, 8 ins. dia., bears N. 18° E., 32 lks.

dist. mkd. T 31 S R 3 W S 3 B T.

A pinon pine, 7 ins. dia., bears S. 60° E., 68 lks.

dist. mkd. T 31 S R 3 W S 10 B T.

A cedar, 8 ins. dia., bears S. 4° 30' W., 29 lks.

dist. mkd. T 31 S R 3 W S 9 B T.

A pinon pine, 6 ins. dia., bears N. 35° W., 34 lks.

dist. mkd. T 31 S R 3 W S 4 B T.

and, mountainous.

Soil, sandy and gravelly loam from 1 to 2 ft. deep, subsoil, clay and hard pan.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Mountainous or heavily timbered land, 80.00 chs.

August 4, 1911: At this cor. I set off 17° 25' N., on the decl.

arc; and at 0 h 5 m p.m., 1.3 m. t., I observe the sun on the

meridian the resulting lat. is 38° 09' N., which is the

proper lat. nearly.

S. 89° 59' E., on a random line bet. secs. 3 and 10.

40.00 Set temp. 1/2 sec. cor.

79.92 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 2, 3, 10

and 11.

Thence I run

N. 89° 57' W., on a true line bet. secs. 3 and 10.

Over mountainous land; through scattering timber and dense

sage brush.

Sub.T.31 S.,R.3 W.-Continued.

- Chains
- Desc.
- 20.00 Bottom of hollow, 100 ft. below cor., course N.80°W.
Asc.
- 58.00 Top of ridge, 250 ft. above hollow, bears N.60°W. and S.60°E.
Desc.
- 39.96 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 3 in N half and S 10 in S half; from which
A pinon pine, 4 ins. dia., bears N.62°W., 55 lks. dist., mkd. $\frac{1}{2}$ S 3 B T.
A pinon pine, 14 ins. dia., bears S.68°E., 61 lks. dist., mkd. $\frac{1}{2}$ S 10 B T.
- 40.60 Bottom of hollow, 50 ft. below ridge, course N.65°W.
Asc.
- 54.50 Top of ridge, 90 ft. above hollow, bears N.10°W. and S.10°E.
Desc.
- 58.00 Bottom of hollow, 50 ft. below ridge, course N.10°W.
Asc.
- 65.00 Top of ridge, 40 ft. above hollow, bears N.20°W. and S.20°E.
Desc.
- 72.00 Bottom of hollow, 300 ft. below ridge, course NW.
Asc.
- 79.92 The cor. of secs. 3, 4, 9, and 10.
Land, mountainous.
Soil, sandy and gravelly loam; 2nd rate. from 1 to 2 ft. deep, subsoil, hard pan.
Timber, cedar and pinon pine.
Undergrowth, sage brush.
Mountainous land, or land covered with dense undergrowth.

79.92 chs.

August 4, 1911.

August 5, 1911: At 7 h 6 m. a.m., 1 m. t., I set off 38°09' N. on the lat. arc; 17°12' W. on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 3, 4, 9, and

Sub.T.31 S.,R.3 W.-Continued.

Chains

a meridian with the solar, at the cor. of secs. 3, 4, 9, and 10.

Thence I run

N.0°02'W., on a true line bet. secs. 3 and 4.

Over rolling mountainous land; through scattering timber and scattering undergrowth.

Desc.

6.00 Bottom of hollow, 90 ft. below cor., course N.85°W.,

Asc.

6.30 Wood road, bears E. and W.

15.00 Top of ridge, 200 ft. above hollow, bears N.80°E. and S.80°W.

Desc.

17.50 Bottom of hollow, 30 ft. below ridge, course S.70°W.

Asc.

23.00 Top of ridge, 240 ft. above hollow, bears N.65°E. and S.65°W.

Desc.

35.00 Bottom of hollow, 150 ft. below ridge, course S.80°W.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec. cor. mkd. on brass cap 1/2 S 4 in W half and S 3 in E half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

44.80 Top of ridge, 90 ft. above hollow, bears N.80°W. and S.80°E.

Desc.

50.00 Bottom of hollow, 80 ft. below ridge, course S.80°W.

Asc.

58.50 Top of ridge, 110 ft. above hollow, bears E. and W.

Desc.

62.00 Bottom of hollow, 70 ft. below ridge, course S.80°W.

Asc.

65.00 Intersect 6th Standard Parallel South, 14.82 chs. N.89° 42'E., from the Standard cor. of secs. 33 and 34, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 3 and 4, mkd. on brass cap

T 31 S R 3 W C C S 33 S 34 in N half.

Sub.T.31 S.,R.3 W.-Continued.

Chains

R 3 W S 3 in SE.; and

T 31 S S 4 in SW. quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor. and, mountainous.

Soil, gravelly; 3rd rate.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, 65.00 chs.

August 5, 1911. At this cor. I set off $17^{\circ}07'N$. on the decl. arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is $38^{\circ}09'N$. which is the proper lat. nearly.

August 5, 1911.

John Stewart

U.S. Transitman.

July 31, 1911: At 7 h 6 m a.m., l.m.t., I set off $38^{\circ}04'N$. on the lat. arc; $18^{\circ}29'N$. on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 4, 5, 32, and 33. on S. bdy. of Tp. heretofore described.

Thence I run

N. $0^{\circ}03'W$., bet. secs. 32 and 33.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.

18.00 Begin more abrupt descent, bears E. and W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap, $\frac{1}{2}$ S 32 in W half and S 33 in E half; from which

A red pine, 10 ins. dia., bears S. $43^{\circ}E$., 45 lks.
dist. mkd. $\frac{1}{2}$ S 33 B T.

A red pine, 8 ins. dia., bears N. $80^{\circ}W$., 35 lks.
dist. mkd. $\frac{1}{2}$ S 32 B T.

40.40 Bottom of canon, 500 ft. below sec. cor., course NW.

Sub.T.31 S.,R.3 W.-Continued.

Chains Asc.

50.50 Top of ledge, bears E. and W.

51.75 Top of ridge, 300 ft. above hollow, bears E. and W. etc
Desc.

68.00 Bottom of hollow, 250 ft. below ridge, course W. from
Asc.

76.00 Top of ridge, 200 ft. above hollow, bears N. 60° E. and S. 60° W.
Desc.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
ground; for cor. of secs. 28, 29, 32, and 33, mkd. on brass cap
T 31 S S, 29. in NW. R. 3 W S 28 in NE. and
S 33 in SE.; and
S 32 in SW. quadrants; from which
A pinon pine, 14 ins. dia., bears N. 13° 30' E., 44 lks
dust. mkd. T 31 S R 3 W S 28 B T.
A mahogany 5 ins. dia., bears S. 64° 30' E., 20 lks.
dist. mkd. T 31 S R 3 W S 33 B T.
A mahogany 4 ins. dia., bears S. 35° W., 26 lks.
dist. mkd. T 31 S R 3 W S 32 B T.
A mahogany 4 ins. dia., bears N. 70° W., 28 lks.
dist. mkd. T 31 S R 3 W S 29 B T.

Land, mountainous .
Soil, sandy and gravelly loam; 2 ft. deep. subsoil, gravel.
Timber, pine, fir, cedar and mahogany, and pinon pine.
Undergrowth, sage brush.
Good grass for grazing.

Mountainous or heavily timbered land, 80.00 chs.
July 31, 1911: At this cor. I sec off 18° 25' N., on the decl
arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the
meridian the resulting lat. is 38° 05' N., which is the
proper lat. nearly.

East, on a random line bet secs. 28 and 33.
40.00 Set temp. 1/2 sec. cor.

Sub.T.31 S.,R.3 W.-Continued.

Chains		
79.94	Intersect N.and S.line,10 lks. SN of the cor.of secs.27,28,33,and 34. Thence I run N.89°56'W.,on a true line bet.secs.28 and 33. Over mountainous land;through scattering timber.	
5.00	Creek,3 lks.wide,2 ins.deep,in bttom of canon,100 ft.below cor.,course N. Asc.	
17.50	Top of ridge,400 ft.above canon,bears N.and S. Desc.	
33.75	Bottom of hollow,150 ft.below ridge,course N. Asc.	
39.97	Set an iron post,3 ft.long,1 in.in dia.,12 ins.in the ground,on solid rock,and surrounded by mound of stone, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 28 in N half and S 33 in S half;from which A pinon pine,4 ins.dia.,bears N.59°W.,48 lks. dist..mkd. $\frac{1}{4}$ S 28 B T. A pinon pine,4 ins.dia.,bears S.47°30'E.,160 lks dist..mkd. $\frac{1}{4}$ S 33 B T.	
41.50	Top of ridge,150 ft.above hollow,bears N.and S. Desc.	
46.00	Bottom of hollow,100 ft.below ridge,course NW. Asc.	
57.50	Top of ridge,150 ft.above hollow,bears NW.and SE. Desc. Enter heavy timber,bears NW and SE.	
79.94	The cor.of secs 28,29,32,and 33. Land,mountainous. Soil,sandy and rocky;18 ins.deep,subsoil clay and rocky. Timber,cedar,pinon pine,aspen,mahogany,and yellow pine. Undergrowth,sage brush and service berry brush. Good grass for grazing. Mountainous or heavily timbered land; 79.94 chs: July 31,1911.	

Sub.T.31 S.R.3 W.-Continued.

Chains

- August 1, 1911: At 7 h 6 m a.m., l.m.t., I set off 38°05' N., on the lat.arc; 18°15' N., on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 28, 29, 32, and 33.

Thence I run
 N.0°03'W., bet.secs.28 and 29.

Over mountainous land; through heavy timber and scattering undergrowth.

Desc.
- 13.00 Bottom of hollow, 150 ft. below cor. course N.80°W.

Asc.
- 17.60 Top of ridge, 60 ft. above hollow, bears E. and W.

Desc.
- 29.00 Bottom of hollow, 200 ft. below ridge, course W.

Asc.
- 34.00 Top of ridge, 100 ft. above hollow, bears E. and W.

Desc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/4 sec. cor. mkd. on brass cap 1/2 S 28 in W half and S 28 in E half; from which
 A pinon pine, 5 ins. dia., bears N.54°30'E., 40 lks
 dist. mkd. 1/4 S 28 B T.
 A pinon pine, 4 ins. dia., bears S.44°30'W., 36 lks
 dist. mkd. 1/2 S 29 B T.
- 53.50 Bottom of hollow, 150 ft. below ridge, course NW.

Asc.
- 59.00 Top of ridge, 60 ft. above hollow, bears NW. and SE.

Desc.
- 63.70 Creek, 3 lks wide, 2 ins. deep, in bottom of hollow, 75 ft. below ridge, course NW.

Asc.
- 70.00 Top of ridge, 75 ft. above hollow, bears N.W. and SE.

Desc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the

Sub.T.31 S.,R.3 W.--Continued.

Chains

ground, on solid rock, and surrounded by mound of stone, for
 cor. of secs. 20, 21, 28, and 29, mkd. on brass cap

T 31 S S 20 in NW.

R 3 W S 21 in NE.

S 28 in SE.; and

S 29 in SW. quadrants; from which

A pinon pine, 4 ins. dia., bears N. 32° 30' E., 110 lks.
 dist. mkd. T 31 S R 3 W S 21 B T.

A pinon pine, 5 ins. dia., bears S. 38° E., 103 lks.
 dist. mkd. T 31 S R 3 W S 28 B T.

A cedar, 4 ins. dia., bears S. 72° 30' W., 18 lks.

dist. mkd. T 31 S R 3 W S 29 B T.

A pinon pine, 6 ins. dia., bears N. 19° 30' W., 69 lks.

dist. mkd. T 31 S R 3 W S 20 B T.

Land, mountainous.

Soil, sandy and rocky; subsoil clay and hard pan.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass

Mountainous or heavily timbered land, 80.00 chs.

August 1, 1911: At this cor. I set off 18° 11' N., on the decl
 arc; and at 0 h 6 m p.m., l.m.t., I observe the sun
 on the meridian the resulting lat. is 38° 06' N., which is the
 proper lat. nearly.

S. 89° 56' E., on a random line bet. secs. 21 and 28.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.92 Intersect N. and S. line, 16 lks. S. of the cor. of secs. 21, 22,
 27, and 28.

Thence I run

S. 89° 57' W., on a true line bet. secs. 21 and 28.

Over mountainous land; through heavy timber and scattering
 undergrowth.

Asc.

17.00 Top of ridge, 75 ft. above cor., bears N. 60° W. and S. 60° E.

Desc.

18.00 Desc. to the top of the ridge and the relative

27.00

Chains

27.00 Wood road,bears NW and SE.
 34.00 Wash,20 lks.wide,6 ft.deep,in bottom of hollow,75 ft.below
 ridge,course N.60°W.

Asc.

35.60 Top of ridge,20 ft.above hollow,bears N.50°W.and S.50°E.

Desc.

39.75 Bottom of hollow,60 ft.below ridge,course N.60°W.

Asc.

39.96 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the
 ground for $\frac{1}{2}$ sec.cor.mkd.pon brass cap $\frac{1}{2}$ S 21 in N half
 and S 28 in S half;from which

A pinon pine,5 ins.dia.,bears N.15°E.,38 lks.
 dist..mkd. $\frac{1}{2}$ S 21 B T.

A pinon pine,6 ins.dia.,bears S.20°E.,27 lks.
 dist.mkd. $\frac{1}{2}$ S 28 B T.

50.00 Top of ridge,65 ft.above hollow,bears N.55°W.and S.55°E.

Desc.

55.00 Bottom of hollow,40 ft.below ridge,course N.60°W.

Creek,3 lks.^{wide} in deep,in bottom. Asc.

65.00 Top of ridge,70 ft.above hollow,bears N.60°W.and S.60°E.

Desc.

71.00 Bottom of hollow,40 ft.below ridge,course N.35°W.

Asc.

79.92 The cor.of secs.20,21,28,and 29.

Land,mountainous

Soil,sandy and rocky;2nd and 3rd rate.

Timber,cedar and pinon pine.

Undergrowth,sage brush.

Good grass for grazing.

Mountainous or heavily timbered land,79.92 chs.

August 1,1911.

August 2,1911:At 7 h 6 m a.m.,l.m.t.,I set off 38°06'N.
 on the lat.arc;17°59'N.,on the decl.arc;and determine a
 meridian with the solar,at the cor.of secs.20,21,28,and

Sub.T.31 S.,R.3 W.-Continued.

- Chains
29. Thence I run $N.03^{\circ}W.$, bet.secs.20 and 21.
Over mountainous land;through heavy timber and scattering undergrowth.
- 14.00 Desc. Bottom of hollow,20 ft.below cor.,course $N.80^{\circ}W.$
Asc.
- 6.00 Wood road,bears $N65^{\circ}W.$ and $S.65^{\circ}E.$
- 9.00 Top of ridge,20 ft.above hollow,bears $N.70^{\circ}W.$ and $S.70^{\circ}E.$
Desc.
- 22.00 Wash;6 lks.wide,8 ft.deep,in bottom of hollow,50 ft.below ridge,course $N.70^{\circ}W.$
Asc.
- 40.00 Set an iron post,3 ft.long,1 in.in dia.,26 ins.in the ground,for $\frac{1}{2}$ sec.cor..mkd.on brass cap $\frac{1}{2}$ S 20 in W half and S 21 in E half;from which
A cedar,5 ins.dia.,bears $N.15^{\circ}W.$,8 lks.
dist..mkd. $\frac{1}{2}$ S 20 B T.
A pinon pine,4 ins.dia.,bears $S.60^{\circ}E.$,38 lks.
dist..mkd. $\frac{1}{2}$ S 21 B T.
- 41.00 Top of spur,20 ft.above hollow,bears NW.and SE.
Desc.
- 47.00 Wash,8 lks.wide,8 ft.deep,course $N.30^{\circ}W.$
Enter rolling valley ,bears $N.30^{\circ}W.$ and $S.30^{\circ}E.$
- 51.00 Wood road,bears $N.60^{\circ}W.$ and $S.60^{\circ}E.$
- 80.00 Set an iron post,3 ft.long,2 ins.in dia.,24 ins.in the ground,for cor.of secs.16,17,20,and 21,mkd.on brass cap
T 31 S S 17 in NW.
R 3 W S 16 in NE.
S 21 in SE.;and
S 20 in SW.quadrants;from which
A pinon pine,13 ins.dia.,bears $N.51^{\circ}E.$,32 lks.
dist..mkd.T 31 S R 3 W S 16 B T.
A pinon pine,6 ins.dia.,bears $S.41^{\circ}E.$,55 lks.
dist..mkd.T 31 S R 3 W S 21 B T.

Sub.T.31 S.R.3 W .°Continued.

Chains

A pinon pine, 14 ins. dia., bears S. 41° W., 45 lks.
dist. mkd. T 31 S R 3 W S 20 B T.

A cedar, 12 ins. dia., bears N. 62° W., 101 lks.
dist. mkd. T 31 S R 3 W S 17 B T.

Land, mountainous and rolling .

Soil, sandy and gravelly loam; from 1 to 2 ft. deep. subsoil,
hard pan.

Timber, cedar and pinon pine .

Undergrowth, sage brush.

Good grass .

Mountainous or heavily timbered land, 80.00 chs.

August 2, 1911: At the noon hour the sky is overcast and
solar observations are impossible.

N. 89° 57' E., on a random line bet. secs. 16 and 21.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.96 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 15, 16,
21, and 22.

Thence I run

West, on a true line bet. secs. 16 and 21.

Over rolling valley; through heavy timber and scattering
undergrowth.

Desc. gradually.

14.00 Wash, 20 lks. wide, 5 ft. deep, course N. 60° W.

Asc. ridge.

17.00 Top of ridge, 50 ft. above wash, bears N. 10° W. and S. 10° E.

Desc.

38.00 Foot of ridge, 150 ft. below ridge, bears N. 60° E. and S. 60° W.

Enter rolling land .

39.98 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 16 in N half
and S 21 in S half; from which

A pinon pine, 12 ins. dia., bears N. 16° E., 25 lks.
dist. mkd. $\frac{1}{4}$ S 16 B T.

Sub.T.31 S.R.3 W.-Continued.

Chains	<p>A pinon pine, 4 ins. dia., bears S.43°E., 60 lks. dist..mkd. $\frac{1}{2}$ S 21 B T.</p>
44.00	<p>Wash, 20 lks. wide, 4 ft. deep, course S.75°W., Desc.</p>
58.10	<p>Wash, 20 lks. wide, 10 ft. deep, course N.15°E. Asc.</p>
64.00	<p>Wood road, bears N.15°W. and S.15°E.</p>
9.96	<p>The cor. of secs. 16, 17, 20, and 21. Land, mountainous and rolling valley. Soil, sandy loam mixed with rock, 2nd rate. 2 ft. deep. Timber, cedar and pinon pine. Undergrowth, sage brush. Good grass. Mountainous or heavily timbered land, 79.96 chs. August 2, 1911.</p>
August 3, 1911:	<p>At 7 h 6 m a.m., l.m..t. I set off 38°07'N. on the lat. arc; 17°44'N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 16, 17, 20, and 21.</p>
Thence I run	<p>N.0°03'W., bet. secs. 16 and 17.</p>
Over	<p>rolling valley land; through heavy timber and scat- tering undergrowth.</p>
Desc	<p>gently 160°E.</p>
44.00	<p>Leave timber and enter dense sage brush, bears W and E.</p>
40.00	<p>Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 17 in W half and S 16 in E half; from which</p>
	<p>A pinon pine, 12 ins. dia., bears N.10°E., 200 lks. dist..mkd. $\frac{1}{2}$ S 16 B T.</p>
	<p>A pinon pine, 8 ins. dia., bears S.85°W., 51 lks. dist..mkd. $\frac{1}{2}$ S 17 B T.</p>
	<p>Enter scattering timber, bears E. and W.</p>
59.00	<p>Enter heavy timber, bears E. and W.</p>

Chains

- 71.70 Wood road, bears NW and SE.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 8, 9, 16, and 17, mkd. on brass cap
- T 31 S S 8 in NW.
R 3 W S 9 in NE.
- S 16 in SE.; and
S 17 in SW. quadrants; from which
- A pinon pine, 5 ins. dia., bears N. 55° E., 42 lks.
dist. mkd. T 31 S R 3 W S 9 B T.
- A pinon pine, 18 ins. dia., bears S. 43° E., 120 lks.
dist. mkd. T 31 S R 3 W S 16 B T.
- A cedar, 10 ins. dia., bears S. 33° W., 103 lks.
dist. mkd. T 31 S R 3 W S 17 B T.
- A pinon pine, 6 ins. dia., bears N. 70° W., 201 lks.
dist. mkd. T 31 S R 3 W S 8 B T.

Land, molling valley.

Soil, sandy loam mixed with some rock; 2 ft. deep, subsoil clay.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass .

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00' chs.

August 3, 1911. At this cor. I set off 17° 40' N., on the decl arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is 38° 08' N., which is the proper lat. nearly.

East, on a random line bet. secs. 9 and 16.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.04 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 9, 10, 15, and 16.

Thence I run

N. 89° 58' W., on a true line bet. secs. 9 and 16.

Chains	
	Over mountainous land; through heavy timber and scattering undergrowth.
	Desc.
7.00	Bottom of hollow, 50 ft. below cor, course N.65°W. Continue desc.
29.60	Wash, 60 lks. wide, 4 ft. deep, course N.60°W. Enter rolling valley land, bears N. and S. Continue descent.
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 9 in N half and S 16 in S half; from which A pinon pine, 8 ins. dia., bears N.64°W., 60 lks. dist. mkd. $\frac{1}{2}$ S 9 B T. A pinon pine, 6 ins. dia., bears S.34°W., 140 lks. dist. mkd. $\frac{1}{2}$ S 16 B T.
40.40	Wood road, bears N.W. and SE.
52.00	Wash, 200 lks. wide, 4 ft. deep, course NW.
57.50	Wash, 100 lks. wide, 4 ft. deep, course N.30°W.
69.00	Wood road, bears N.60°W. and S.60°E.
80.04	The cor. of secs. 8, 9, 16, and 17. Land, mountainous and rolling. Soil, sandy loam mixed with rock. Timber, cedar and pinon pine. Undergrowth, sage brush. Good grass for grazing. Mountainous or heavily timbered land, 80:04 chs. August 3, 1911. August 4, 1911: At 7 h 6 m a.m., l.m.t. I set off 38°08'N., on the lat. arc; 17°28'N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 8, 9, 16, and 17. Thence I run N.0°03'W., bet. secs. 8 and 9. Over rolling valley land; through heavy timber and

Chains

dense undergrowth.

Desc.

5.00 Leave heavy and enter scattering timber, bears E. and W.

38.00 Center of wash, 300 lks. wide, 20 ft. deep, course NW.

Asc. gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 8 in W half and S 9 in E half; from which

A pinon pine, 7 ins. dia., bears S. 5° E. 40 lks.

dist. mkd. $\frac{1}{2}$ S 9 B T.

A pinon pine, 5 ins. dia., bears N. 4° W., 21 lks.

dist. mkd. $\frac{1}{2}$ S 8 B T.

72.30 Wood road, bears NW and SE.

75.20 Wood road, bears NW and SE.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 4, 5, 8, and 9, mkd. on brass cap

T 31 S S 5 in NW.

R 3 W S 4 in NE.

S 9 in SE.; and

S 8 in SW. quadrants; and raise a mound of stone,

2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

land, rolling valley.

Soil, sandy 2nd rate. 2 ft. deep.

Undergrowth, sage brush.

Timber, cedar and pinon pine.

Good grass for grazing.

Heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

August 4, 1911: At this cor. I set off 17° 25' N., on the decl. arc; and at 0 h. 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 08' N., which is the proper lat. nearly.

S. 89° 58' E., on a random line bet. secs. 4 and 9.

Sub.T.31 S.,R.3 W.-Continued.

Chains

40.00 Set temp. 1/2 sec. cor.
80.02 Intersect N. and S. line, 10 lks. S. of the cor. of secs. 3, 4, 9, and 10.

Thence I run

S. 89° 58' W., on a true line bet. secs. 4 and 9.

Over mountainous land; through scattering timber and dense sage brush.

Desc.

36.00 Bottom of hollow, 100 ft. below cor., course SW.
Wood road, bears NE and SW.

Desc. at 11.

0.01 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec. cor. mkd. on brass cap. 1/4 S 4 in N half and S 9 in S half; from which

A cedar, 10 ins. dia., bears N. 75° W., 75 lks.

dist. mkd. 1/4 S 4 B.T.

A cedar, 12 ins. dia., bears S. 65° W., 30 lks.

11.00 dist. mkd. 1/4 S 9 B.T.

50.50 Bottom of wash from same hollow, 20 lks. wide, 4 ft. deep, course N. 60° W.

Enter rolling valley land, bears N. 60° W. and S. 60° E.

64.60 Wood road, bears NW and SE.

80.02 The cor. of secs. 4, 8, and 9.

Land, rolling and mountainous.

Soil, sandy loam mixed with rock; 2nd rate subsoil, clay.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

80.02 chs.

August 4, 1911.

Junby Stewart

U. S. Transitman.

Chains

- August 5, 1911: At 2 h 6 m p.m., limit, I set off $38^{\circ}09'N.$, on the lat. arc; $17^{\circ}07'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 4, 5, 8, and 9. Thence I run $N.0^{\circ}03'W.$, bet. secs. 4 and 5. Over rolling valley; through dense undergrowth and scattering timber. Desc. gently.
- 8.00 Wash, 100 lks. wide, 3 ft. deep, course $N.10^{\circ}W.$
- 9.50 Wood road, bears $N.60^{\circ}W.$ and $S.60^{\circ}E.$
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 5 in W half and S 4 in E half; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
- 40.10 Wash, 10 lks. wide, 3 ft. deep, course $NW.$
- 60.00 Wash, 15 lks. wide, 2 ft. deep, course $W.$
- 64.65 Intersect 6th Standard Parallel South, 13.88 chs. $N.89^{\circ}46'$ E., from the the Standard cor. of secs. 32 and 33, heretofore described.
- Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 4 and 5, mkd. on brass cap C C T 30 S R 3 W S 32 S 33 in N half R 3 W S 4 in SE; and on sec. 4, mkd. on brass cap T 31 S S 5 in SW quadrants; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor. Land, rolling valley. Soil, red sand and gravel about 2 ft. deep; subsoil hard pan and gravel. Timber, cedar and pinon pine. undergrowth, sage brush. Good grass. Land covered with dense undergrowth, 64.65 chs.

August 5, 1911.

John R. Stewart
U.S. Transitman.

Sub.T.31 S.,R.3 W.-Continued. S.T.,S 18.1.1888

Chains

August 5, 1911: At 7 h 6 m a.m., l.m.t., I set off 38°04'N., on the lat.arc; 17°12'N., on the decl.arc; and determine a meridian with the solar, at the cor. of secs. 5, 6, 31, and 32, on S.bdy. of Tp., heretofore described.

Thence I run

N.0°03'W., bet.secs.31 and 32.

Over mountainous land; through heavy timber and scattering undergrowth.

Asc.

11.25 Top of ridge, 100 ft. above cor., bears E. and W.

Desc.

18.50 Bottom of hollow, 225 ft. below ridge, course W.

Asc.

32.00 Top of ridge, 150 ft. above hollow, bears E. and W.

Leave heavy and enter scattering timber, bears E. and W.

Desc.

40.00 Set an iron post, 3 ft long, 1 in. in dia., .12 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 31 in W half and S 32 in E half; from which

A pinon pine, 4 ins. dia., bears N.59°30'E., 75 lks. dist. mkd. $\frac{1}{2}$ S 32 B T.

A pinon pine, 5 ins. dia., bears S.65°W., 96 lks. dist. mkd. $\frac{1}{2}$ S 31 B T.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of sec. 29, 30, 31, and 32, mkd. on brass cap

T 31 S S 30 in NW.

R 3 W S 29 in NE.

S 32 in SE.; and

S 31 in SW. quadrants; from which

A cedar, 6 ins. dia., bears N.54°E., 145 lks.

dist. mkd. T 31 S R 3 W S 29 B T.

A cedar, 5 ins. dia., bears S.75°E., 70 lks.

dist. mkd. T 31 S R 3 W S 32 B T.

A cedar, 6 ins. dia., bears S.26°30'W., 75 lk s.

dist. mkd. T 31 S R 3 W S 31 B T.

Sub.T.31 S.,R.3 W.-Continued.

Chains

- A cedar, 6 ins. dia., bears N.6°W., 22 lks.
dist..mkd.T 31 S R 3 W S 30 B T.
- Land, mountainous .
- Soil, clay and gravelly ; 2nd rate. 2 ft. deep.
- Volcanic formation.
- Timber, cedar, pinon pine, and mahogany.
- Undergrowth, sage brush.
- Mountainous or heavily timbered land, 80.00 chs.
- August 5, 1911: At this cor. I set off 17°03'N., on the 1st arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°05'N., which is the proper lat. nearly.
- East, on a random line bet. secs. 29 and 32.
- 40.00 Set temp. $\frac{1}{2}$ sec. cor.
- 80.00 Intersect N. and S. line, at the cor. of secs. 28, 29, 32, and 33
Thence I run
West, on a true line bet. secs. 29 and 32.
Over mountainous land; through heavy timber.
Desc. through dense undergrowth.
- 15.50 Leave heavy and enter scattering timber, bears N. and S.
- 22.50 Wood road, bears NW and SE.
- 24.00 Bottom of hollow, 200 ft. below cor., course N.W.
- Asc.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground, on rock, and surrounded by mound of stone, for $\frac{1}{2}$ sec. cor..mkd. on brass cap $\frac{1}{2}$ S 29 in N half and S 32 in S half; from which
A pinon pine, 4 ins. dia., bears N.60°W., 15 lks.
dist..mkd. $\frac{1}{2}$ S 29 B T.
A pinon pine, 4 ins. dia., bears S.15°E., 26 lks.
dist..mkd. $\frac{1}{2}$ S 32 B T.
- 45.00 Top of ridge, 100 ft. above hollow, bears N.20°E. and S.20°W.
- Desc.
- 80.00 The cor. of secs. 29, 30, 31, and 32.

Sub.T.31 S.,R.3 W.-Continued.

Chains

Land, mountainous.
 Soil, red sand and rocky 18 ins. deep, subsoil red clay.
 Timber, cedar, pinon pine and mahogany.
 Undergrowth, sage brush.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth, 80.00 chs.

August 5, 1911.

August 7, 1911: At 7 h 6 m a.m., l.m.t., I set off $38^{\circ}05'N.$,
 on the lat. arc; $16^{\circ}40'E.$, on the decl. arc; and determine a
 meridian with the solar, at the cor. of secs. 29, 30, 31, and
 32.

Thence I run

West, on a random line bet. secs. 30 and 31.

40.00 Set temp. $\frac{1}{2}$ sec. cor.77.65 Intersect W. bdy. of Tp., at the cor. of secs. 25, 30, 31, and
36, heretofore described.

Thence I run

East, on a true line bet. secs. 30 and 31.

Over mountainous land; through heavy timber.

Asc.

3.40 Top of ridge, 30 ft. above cor., bears $N.20^{\circ}W.$ and $S.20^{\circ}E.$

Desc.

9.75 Wood road, bears $N.30^{\circ}W.$ and $S.30^{\circ}E.$ 21.00 Lost Creek, 4 lks. wide, 3 ins. deep, in bottom of canon, 125
ft. below ridge, course N.

Asc.

28.00 Begin steeper ascent, bears N. and S.

30.50 Irrigation ditch, 2 lks. wide, 8 ins. deep, course N.

37.65 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 30° in N half
and S 31° in S half; from which

A pinon pine, 6 ins. dia., bears $N.25^{\circ}W.$, 37 lks.
 dist. mkd. $\frac{1}{4}$ S 30° B T.

A pinon pine, 8 ins. dia., bears $S.5^{\circ}W.$, 24 lks.

Sub.T.31 S.,R.3 W.-Continued.

Chains

dist..mkd. $\frac{1}{4}$ S 31 B T.

- 41.30 Wood road; bears NW and SE.
- 68.00 Leave heavy and enter scattering timber, bears N. and S.
- 77.65 The cor. of secs. 29, 30, 31, and 32.
 Land, mountainous.
 Soil, red clay about 18 ins. deep. subsoil, clay and rocky.
 Timber, cedar, pinon pine,
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous or heavily timbered land, or land covered
 with dense undergrowth; 77.65 chs.
 August 7, 1911: At this cor. I set off $16^{\circ}36'N.$, on the decl.
 arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the
 meridian and the resulting lat. is $38^{\circ}05'N.$, which is the
 proper lat. nearly.

12.30 p.m. August 7, 1911.

Jurby Stewart
 U.S. Transitman.

August 7, 1911: At 7 h 6 m a.m., l.m.t., I set off $38^{\circ}05'$
 $N.$, on the lat. arc; $16^{\circ}40'E.$, on the decl. arc; and determine
 a meridian with the solar, at the cor. of secs. 29, 30, 31, and
 32.

Thence I run
 $N.0^{\circ}03'W.$, bet. secs. 29 and 30.
 Over mountainous land; through scattering timber and
 dense undergrowth.

Desc.

- .50 Enter heavy timber, bears E. and W.
- 15.00 Bottom of hollow, 75 ft. below cor., course NW.
- Asc.
- 40.00 Top of ridge, 100 ft. above hollow, bears $N.70^{\circ}W.$ and $S.70^{\circ}E.$
 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 30 in W half

Sub.T.31 S.,R.3 W.-Continued.

Chains	<p>and S 29 in E half; from which</p> <p>A pinon pine, 12 ins. dia., bears S. 74° E., 38 lks. dist. mkd. $\frac{1}{4}$ S 29 B T.</p> <p>A pinon pine, 18 ins. dia., bears N. 60° W., 14 lks. dist. mkd. $\frac{1}{4}$ S 30 B T.</p>
80.00	<p>Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground, on solid rock, and surrounded by mound of stone, for cor. of secs. 19, 20, 29, and 30, mkd. on brass cap.</p> <p>T 31 S S 19 in NW.</p> <p>R 3 W S 20 in NE.</p> <p>S 29 in SE.; and</p> <p>S 30 in SW. quadrants; from which</p> <p>A pinon pine, 4 ins. dia., bears N. 35 E, 62 lks. dist. mkd. T 31 S R 3 W S 20 B T.</p> <p>A pinon pine, 9 ins. dia., bears S. 80° E., 8 lks. dist. mkd. T 31 S R 3 W S 29 B T.</p> <p>A pinon pine, 6 ins. dia., bears S. 45° W., 40 lks. dist. mkd. T 31 S R 3 W S 30 B T.</p> <p>A pinon pine, 6 ins. dia., bears N. 25° W., 16 lks. dist. mkd. T 31 S R 3 W S 19 B T.</p>
	<p>Land, mountainous</p> <p>Soil, red sandy and clay loam and rocky; 2nd and 3rd rate. 2 ft. deep. Subsoil, red clay.</p> <p>Timber cedar and pinon pine.</p> <p>Undergrowth, sage brush.</p> <p>Good grass for grazing.</p> <p>Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.</p>
	<p>August 7, 1911 : At this cor. I set off 16° 36' N., on the decl. arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 06' N., which is the proper lat. nearly.</p>
	<p>East, on a random line bet. secs. 20 and 29.</p>
40.00	<p>Set temp. $\frac{1}{2}$ sec. cor.</p>
80.02	<p>Intersect N. and S. line, at the cor. of secs. 20, 21, 28, and 29.</p>

Sub.T.31 S.,R.3 W.-Continued.

Chains	
	Thence I run ...
	West, on a true line bet. secs. 20 and 29.
	Over mountainous land; through heavy timber and scattering
	sage brush.
	Desc.
12.45	Creek, $1\frac{1}{2}$ lks. wide, 2 ins. deep, in bottom of hollow, 30 ft.
	below cor., course N.10°W.
	Asc.
20.00	Top of ridge, 30 ft. above hollow, bears N.20°W. and S.20°E.
	Desc.
31.50	Bottom of hollow, 40 ft. below ridge, course N.10°W.
	Asc.
37.00	Top of ridge, 40 ft. above hollow, bears N.60°W. and S.60°E.
	Desc.
40.01	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
	ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 20 in N half
	and S 29 in S half; from which
	A pinon pine, 4 ins. dia., bears N.15°E., 29 lks.
	dist. mkd. $\frac{1}{4}$ S 20 B T.
	A cedar, 3 ins. dia., bears S.2°E., 13 lks.
	dist. mkd. $\frac{1}{4}$ S 29 B T.
46.50	Bottom of hollow, 60 ft. below ridge, course NW.
	Asc.
56.00	Wood road, bears N.20°W. and S.20°E.
57.50	Top of ridge, 25 ft. above hollow, bears N.20°W. and S.20°E.
	Desc.
65.00	Bottom of hollow, 25 ft. below ridge, course N.30°W.
	Asc.
80.02	The cor. of secs. 19, 20, 29, and 30, 40 ft. above hollow.
	Land, mountainous
	Soil, sandy and clay loam about 18 ins. deep, subsoil clay.
	Timber, cedar and pinon pine.
	Undergrowth, sage brush.
	Good grass for grazing.
	Mountainous or heavily timbered land; 80.02 chs.

Sub.T.31 S R 3 W Continued.

Chains

August 7, 1911.

John R Stewart

U.S. Transitman

August 7, 1911: At 2nd 6 m p.m., l.m.t., I set off $38^{\circ}06'N.$, on the lat. arc; $16^{\circ}35'N.$, on the decl. arc; and determine a meridian with the solar, at the cor. of sec. 19, 20, 29, and 30.

Thence I run

West, on a random line bet. secs. 19 and 30.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.58 Intersect W. bdy. of Tp., 10 lks. S. of the cor. of secs. 19, 24, 25, and 30, heretofore described.

Thence I run

$S. 89^{\circ}56'E.$, on a true line bet. secs. 19, and 30.

Over mountainous land; through heavy timber and scattering sage brush.

Desc.

.15 Wash, 100 lks. wide, 10 ft. deep, course $N. 20^{\circ}W.$

Asc.

3.00 Wood road, bears N. and S.

5.00 Begin steeper ascent, bears N. and S.

18.90 Wood road, bears N. and S.

19.00 Top of ridge, 65 ft. above cor., bears N. and S.

Desc.

19.60 Irrigation ditch 4 lks. wide, 8 ins. deep, course N.

30.50 Bottom of hollow, 60 ft. below ridge, course NW.

Asc.

31.40 Wood road, bears $N. 30^{\circ}W.$ and $S. 30^{\circ}E.$

37.58 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 19 in N half and S 30 in S half; from which

A pinon pine, 6 ins. dia., bears $N. 62^{\circ}W.$, 23 lks. dist. mkd. $\frac{1}{4}$ S 19 B. T.

Sub.T.31 S.,R.3 W.-Continued.

Chains	A pinon pine, 5 ins. dia., bears S.22°W., 26 lks. dist. mkd. $\frac{1}{4}$ S 30 B T.
40.00	Top of ridge, 60 ft. above hollow, bears N.20°W. and S.20°E. Desc.
67.00	Wood road, bears NW and SE.
77.58	The cor. of secs. 19, 20, 29, and 30. Land, mountainous Soil, sandy and clay loam about 18 ins. deep. subsoil, clay. Timber, cedar and pinon pine. Undergrowth sage brush. Good grass for grazing. Mountainous or heavily timbered land, 77.58 chs.
	August 7, 1911. <i>Jimmy Stewart</i> U.S. Transitman
	August 8, 1911: At 7 h 6 m. a.m., l.m.t., I set off 38°06' N., on the lat. arc; 16°24' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 19, 20, 29, and 30. Thence I run N.0°03'W., bet. secs. 19 and 20. Over mountainous land; through heavy timber. Desc.
20.00	Wash, 70 lks. wide, 6 ft. deep, course NW. Foot of descent enter rolling valley, bears NW and SE.
28.00	Wood road, bears NW and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 19 in W half and S 20 in E half; from which A pinon pine, 8 ins. dia., bears S.68°E., 38 lks. dist. mkd. $\frac{1}{4}$ S 20 B T. A pinon pine, 7 ins. dia., bears N.28°W., 40 lks. dist. mkd. $\frac{1}{4}$ S 19 B T.
54.00	Leave timber, bears E. and W.

Sub.T.31 S.,R.3 W.-Continued.

Chains

- 56.00 Wash, 50 lks. wide, 4 ft. deep, course N. 80° W.
- 60.00 Wood road, bears E. and W.
- 75.00 Enter heavy timber, bears E. and W.
- 76.50 Leave timber, bears E. and W.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 17, 18, 19, and 20, mkd. on brass cap
 T 31 S S 18 in NW.
 R 3 W S 17 in NE.
 S 20 in SE.; and
 S 19 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
- Land, rolling and mountainous.
 Soil, sandy and clay loam; mixed with rock, 2 ft. deep. subsoil clay.
 Timber, cedar and pinon pine.
 Undergrowth, sage brush.
 Good grass for grazing.
- Mountainous land or land heavily timbered, 80.00 chs.
 August 8, 1911: At this cor. I set off 16° 19' N., on the decl. arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38° 07' N., which is the proper lat. nearly.
- East, on a random line bet. secs. 17 and 20.
- 40.00 Set temp. ¼ sec. cor.
- 79.94 Intersect N. and S. line, 2 lks. N. of the cor. of secs. 16, 17, 20, and 21.
 Thence I run
 N. 89° 59' W., on a true line bet. secs. 17 and 20.
 Over rolling land; through dense undergrowth and scattering timber.
 Desc. gradually.
- 25.00 Leave timber, bears N. and S.
- 39.97 Set an iron post, 3 ft. long, 1 in in dia., 26 ins. in the

Sub.T.31 S.,R.3 W.-Continued.

Chains

Ground, for $\frac{1}{4}$ sec.cor..mkd.on brass cap $\frac{1}{4}$ S 17 in N half
 and S 20 in S half; from which
 A cedar, 10 ins.dia., bears N.22°E., 195 lks.
 dist..mkd. $\frac{1}{4}$ S 17 B T.
 A pinon pine, 20 ins.dia., bears S.46°E., 265 lks.
 dist..mkd. $\frac{1}{4}$ S 20 B T.

79.94

The cor.of secs.17,18,19, and 20.

Land, rolling .

Soil, sandy loam; 200 ft.deep.subsoil clay.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass.

~~Mountainous~~ Heavily timbered land, or land covered
 with dense undergrowth, 79.94 chs.

August 8, 1911.

John Stewart

U.S. Transitman.

August 8, 1911: At 7 h 6 m a.m., l.m.t., I set off 38°07'
 N., on the lat.arc; 16°24' N., on the decl.arc; and determine
 a meridian with the solar, at the cor.of secs.17,18,19,
 and 20.

Thence I run

N.89°56'W., on a random line bet.secs.18 and 19.

40.00

Set temp. $\frac{1}{4}$ sec.cor.

77.50

Intersect W.bdy.of Tp.20 lks.N.of the cor.of secs.13,18,
 19, and 24, heretofore described.

Thence I run

N.89°56'E., on a true line bet.secs.18 and 19.

Over mountainous land; through scattering timber and
 dense undergrowth.

Asc.

5.00

Begin steep ascent, bears NE and SW.

35.00

Top of ridge, 200 ft.above cor., bears NE and SW.

Desc.

27.50

Sub.T.31 S.,R.3 W.-Continued.

Chains	
37.50	Set an iron post, 3 ft. long, 1 in. in dia. .26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 18 in N half and S 19 in S half; from which A cedar, 8 ins. dia., bears N.77°W., 127 lks.
	dist. mkd $\frac{1}{2}$ S 18 B.T. A pinon pine, 24 ins. dia., bears S.88°W., 122 lks. dist. mkd. $\frac{1}{2}$ S 19 B.T.
47.50	Bottom of hollow, 300 ft. below ridge, course SE. Asc.
51.00	Top of ridge, 40 ft. above hollow, bears NW. and SE. Desc.
62.50	Leave timber, bears NE and SW.
76.00	Foot of descent, 200 ft. below ridge, bears N.70°E. and S.70°W. Enter rolling valley land.
77.50	The cor. of secs. 17, 18, 19, and 20. Land, mountainous and rolling valley. Soil, sandy loam mixed with rock about 2 ft. deep subsoil rock and gravel. Timber, cedar and pinon pine. Undergrowth, sage brush. Good grass for grazing. Mountainous land, or land covered with dense undergrowth, 77.50 chs.
	August 8, 1911: At this cor. I set off 16°19'N., on the decl. arc; and at 0 h 6 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is 38°07'N., which is the proper lat. nearly.
	N.0°03'W., bet. secs. 17 and 18. Over rolling land; through dense undergrowth. Asc. gradually.
1.50	Begin ascent of ridge, bears N.70°E. and S.70°W.
5.00	Enter scattering timber, bears E. and W.

Subtract 31 S., R. 3 W. - Continued...

Chains	
29.50	Top of ridge, 80 ft. above cor., bears N. 70° W. and S. 70° E.
	Desc.
35.00	Bottom of hollow, 50 ft. below ridge, course S. 75° W.
	Asc.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
	ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 18 in W half
	and S 17 in E half; from which
	A pinon pine, 10 ins. dia., bears S. 47° E., 80 lks.
	dist. mkd. $\frac{1}{4}$ S 17 B T.
	A cedar, 4 ins. dia., bears N. 20° W., 28 lks.
	dist. mkd. $\frac{1}{4}$ S 18 B T.
41.60	Top of ridge, 240 ft. above hollow, bears N. 30° E. and S. 30° W.
	Desc.
50.00	Bottom of hollow, 30 ft. below ridge, course W.
	Asc.
57.60	Top of ridge, 230 ft. above hollow, bears N. 55° W. and S. 55° E.
	Desc.
63.00	Bottom of hollow, 150 ft. below ridge, course N. 60° W.
	Asc.
70.00	Top of ridge, 80 ft. above hollow, bears N. 80° W. and S. 80° E.
	Desc.
73.00	Bottom of hollow, 40 ft. below ridge, course N. 70° W.
	Asc.
74.00	Leave timber, bears E. and W.
77.00	Top of ridge, 200 ft. above hollow, bears N. 80° W. and S. 80° E.
	Desc.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in the
	ground on solid rock, and surrounded by mound of stone,
	for cor of secs. 7, 8, 17, and 18, mkd. on brass cap
	T 31 S S 7 in NW.
	R 3 W S 8 in NE.
	S 17 in SE.; and
	S 18 in SW quadrants; and raise a mound of stone,
	2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Soil, sandy and clay loam; 2 ft. deep, subsoil clay and rocky
	Timber, cedar and pinon pine.

Chains

Undergrowth, sage brush.
Good grass for grazing.
Mountainous land, or land covered with dense undergrowth,
80.00 chs.

August 8, 1911.

Timothy Stewart

U.S. Transitman.

August 9, 1911: At 7 h 5 m a.m., l.m.t., I set off 38°08' N., on the lat. arc; 16°07' N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 7, 8, 17, and 18.

Thence I run

S. 89°59' E., on a random line bet. secs. 8 and 17.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

80.00 Intersect N. and S. line, 2 lks. S. of the cor. of secs. 8, 9, 16 and 17.

Thence I run

West, on a true line bet. secs. 8 and 17.

Over rolling valley; through dense undergrowth and heavy timber.

Desc. gradually.

3.00 Leave timber, bears N. and S.

23.70 Wood road, bears N. 50° E. and S. 50° W.

31.00 Wash, 100 lks. wide, 4 ft. deep, course N. 30° E.

Leave valley land, and ascend mountain, bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 8 in N half and S 17 in S half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

55.00 Enter heavy timber, bears N. and S.

64.00 Top of ridge, 200 ft. above wash, bears N. 15° W. and S. 15° E.
Desc.

75.00 Bottom of hollow, 250 ft. below ridge, course N. W.

Asc.

Chains

Asc. Leave timber, bears NW and SE.

77.75 Top of ridge, 100 ft. above hollow, bears N and S.

Desc.

80.00 The cor. of secs. 7, 8, 17, and 18.

Land, mountainous and rolling valley.

Soil, sandy and gravelly; 2nd rate. about 2 ft. deep, sub soil clay.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered with dense undergrowth, 80.00 chs.

August 9, 1911: At this cor. I set off 16°02'N., on the decl arc; and at 0 h 5 m p.m., l.m.t., I observe the sun on the meridian the resulting lat. is 38°08'N., which is the proper lat. nearly.

noon August 9, 1911.

John Stewart
U.S. Transitman

August 9, 1911: At 7 h 5 m a.m., l.m.t., I set off 38°08' N., on the lat. arc; 16°07'N., on the decl. arc; and determine a meridian with the solar, at the cor. of secs. 7, 8, 17, and 18.

Thence I run S. 89°56'W., on a random line bet. secs. 7 and 18.

40.00 Set temp. 1/2 sec. cor.

77.46 Intersect W. bdy. of Tp., 10 lks. S. of the cor. of secs. 7, 12, 13, and 18, heretofore described.

Thence I run East, on a true line bet. secs. 7 and 18.

Over nearly level land; through dense sage brush Desc. gently.

5.25 Wood road, bears N. 10°W. and S. 10°E.

37.40 Wash, 10 lks. wide, 3 ft. deep, course N.

Chains

37.46 Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, on solid rock, and surrounded by mound of stone, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 7 in N half and S 18 in S half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

39.00 Begin ascent of mountain, bears N. 10° E. and S. 10° W.

45.50 Wash, 50 lks. wide, 2 ft. deep, in mouth of hollow, course NW.

Asc. ...

60;00 Top of ridge, 75 ft. above wash, bears NE. and SW.

Desc. ...

69.00 Bottom of hollow, 80 ft. below ridge, course S. 60° W.

Asc. ...

77.46 The cor. of secs. 7, 8, 17, and 18. Land, mountainous, and nearly level.

Soil, sandy loam; 2nd rate.

Timber, cedar and pinon pine, very scattering.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,

77.46 chs.

August 9, 1911: At this cor. I set off $16^{\circ}02'N.$, on the decl. arc; and at 0 h 5 m p.m., l.m.t., I observe the sun on the meridian, the resulting lat. is $38^{\circ}08'N.$, which is the proper lat. nearly.

noon August 9, 1911.

Emily Stewart

U.S. Transitman.

August 9, 1911: At 2 h 5 m p.m., l.m.t., I set off $38^{\circ}08'N.$,

on the lat. arc; $16^{\circ}01'N.$, on the decl. arc; and determine a

meridian with the solar, at the cor. of secs. 7, 8, 17, and 18.

hence I run

$N.0^{\circ}03'W.$, bet. secs. 7 and 8.

Over mountainous land; through dense undergrowth.

Desc. ...

Sub.T.31 S.,R.3.W.-Continued.

Chains

- 5.00 Bottom of hollow, 120 ft. below cor, course S.75°W.,
Asc.
- 12.50 Top of ridge, 250 ft. above hollow, bears N.80°E. and S.80°W.
Desc.
- 12.50 Enter scattering timber, bears E. and W.
- 23.00 Bottom of hollow, 120 ft. below ridge, course N.30°W.
Asc.
- 29.00 Top of ridge, 80 ft. above hollow, bears N.80°W. and S.80°E.
Desc.
- 40.00 Set an iron post, 3 ft. long, 1 1/2 ins. in dia., 1 1/2 ins. in the
ground, on solid rock, and surrounded by mound of stone,
for 1/4 sec. cor. mkd. on brass cap 1/4 S 7 in W half and S
8 in E half; from which
A pinon pine 6 ins. dia., bears N.28°E., 32 lks.
dist. mkd. 1/4 S 8 B T.
A cedar, 6 ins. dia., bears N.85°W., 52 lks.
dist. mkd. 1/4 S 7 B T.
- 42.00 Leave timber, bears E. and W.
- 47.40 Wood road, bears N.30°E. and S.30°W.
- 52.60 Bottom of hollow, 100 ft. below ridge, course N.20°E.
Asc.
- 61.10 Top of ridge, 70 ft. above hollow, bears N.20°E. and S.20°W.
Desc.
- 70.00 Bottom of hollow, 90 ft. below ridge, course N.60°W.
Asc.
- 71.00 Wood road, bears N.60°W. and S.60°E.
- 78.00 Top of ridge, 30 ft. above hollow, bears E. and W.
Desc.
- 78.80 Bottom of hollow, 20 ft. below ridge, course S.70°W.
Asc.
- 80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the
ground, for cor. of secs. 5, 6, 7, and 8, mkd. on brass cap
T 31 S S 6 in NW.
R 3 W S 5 in NE.
S 8 in SE.; and
S 7 in SW. quadrants; and raise a mound of stone,

Chains

2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Land, mountainous.

Soil, sandy and gravelly; 2nd rate. 18 ins. deep. subsoil, clay and gravel.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth,
80.00 chs.

East, on a random line bet. secs. 5 and 8.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.86 Intersect N. and S. line, 10 lks. N. of the cor. of secs. 4, 5, 8, and 9.

Thence I run

N. $89^{\circ}56'$ W., on a true line bet. secs. 5 and 8.

Over nearly level land; through dense undergrowth and scattering timber.

Desc. gently.

36.00 Wash, 30 lks. wide, 5 ft. deep, course N.

Asc. mountain, bears N. and S.

39.93 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{2}$ S 5 in N half and S 8 in S half; and from which

A pinon pine, 8 ins. dia., bears N. 30° W., 73 lks.

dist. mkd. $\frac{1}{4}$ S 5 B T.

A pinon pine, 5 ins. dia., bears S. 50° E., 49 lks.

dist. mkd. $\frac{1}{4}$ S 8 B T.

44.50 Leave timber, bears N. and S.

46.50 Wood road, bears N. 30° W. and S. 30° E.

47.00 Top of ridge, 200 ft. above wash, bears N. 30° W. and S. 30° E.

Desc.

50.00 Enter heavy timber, bears N. and S.

52.50 Bottom of hollow, 200 ft. below ridge, course N. 60° W.

Asc.

Sub.T.31 S.,R.3 W.-Continued.

Chains

57.50 Leave timber, bears N. and S.

65.00 Top of ridge, 150 ft. above hollow, bears NW and SE.
Desc.

79.86 The cor. of secs. 5, 6, 7, and 8.

Land, mountainous and rolling.

Soil, gravelly; 3rd rate. 2 ft. deep.

Timber, cedar and pinon pine.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous or heavily timbered land, or land covered
with dense undergrowth, 79.86 chs.

August 9, 1911.

John R. Stewart

U. S. Transitman.

August 9, 1911: At 2 h 5 m p.m., l.m.t., I set off $38^{\circ}09'N.$,
on the lat. arc; $16^{\circ}01'N.$, on the decl. arc; and determine a
meridian with the solar, at the cor. of secs. 5, 6, 7, and 8.

Thence I run

West, on a random line bet. secs. 6 and 7.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

77.36 Intersect W. bdy. of Tp., 14 lks. S. of the cor. of secs. 1, 6, 7,
and 12, heretofore described.

Thence I run

$S. 89^{\circ}54'E.$, on a true line bet. secs. 6 and 7.

Over rolling land; through dense undergrowth.

Desc. gently.

11.40 Wash, 30 lks. wide, 3 ft. deep, course $N. 15^{\circ}W.$

37.36 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
ground, for $\frac{1}{2}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 6 in N half
and S 7 in S half; dig pits, 18x18x12 ins. E. and W. of post,
3 ft. dist.; and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
high, N. of cor.

S b.T 31 S., R.3 W.-Continued.

Chains

- 41.40 Wash, 20 lks. wide, 2 ft. deep, course N.10°W.
- 60.40 Leave rolling land and begin ascent, bears N. and S.
- 77.36 The cor. of secs. 5, 6, 7, and 8.
 Land, rolling and mountainous.
 Soil, in valley sandy loam 2 ft. deep. subsoil clay.
 No timber.
 Undergrowth, sage brush.
 Good grass for grazing.
 Mountainous land, or land covered with dense undergrowth,
 77.36 chs.
- N.0°03'W., on a true line bet. secs. 5 and 6.
 Over mountainous land; through dense undergrowth.
 Asc.
- 3.50 Top of ridge, 150 ft. above cor., bears N.70°W. and S.70°E.
 Desc.
- 7.50 Bottom of hollow, 80 ft. below ridge, course W.
 Asc.
- 12.60 Top of ridge, 100 ft. above hollow, bears N.80°W. and S.80°E.
 Desc.
- 15.00 Bottom of hollow, 30 ft. below ridge, course N.80°W.
 Asc.
- 19.00 Top of ridge, 80 ft. above hollow, bears N.80°W. and S.80°E.
 Desc.
- 32.50 Bottom of steep descent, 200 ft. below ridge, bears E. and
 W.
 Enter valley.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the
 ground, for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 6 in W half
 and S 5 in E half; dig pits, 18x18x12 ins. N. and S. of post,
 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft.
 high, W. of cor.
- 46.00 Wood road, bears N.70°E. and S.70°W.
- 56.00 Wash, 70 lks. wide, 3 ft. deep, course N.80°W.

Sub.T.31 S.,R.3 W.-Continued.

Chains

64.00 Intersect 6th Standard Parallel South, 14.74 chs. N. 89° 32' E of the standard cor. of secs. 31 and 32, heretofore described.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for closing cor. of secs. 5 and 6, mkd. on brass cap

C C T 30 S R 3 W S 31 S 32 in N half.

R 3 W S 5 in SE.; and

T 31 S S 6 in SW quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.

Land, mountainous and level.

Soil in valley is sandy and clay loam about 2 ft. deep, subsoil, clay. Soil, on mountainous land is gravelly; 2nd rate.

No timber.

Undergrowth, sage brush.

Good grass for grazing.

Mountainous land, or land covered with dense undergrowth, 64.00 chs.

August 9, 1911.

Quincy Stewart

U.S. Transitman.

GENERAL DESCRIPTION.

This township contains several varieties of land from high mountain ridges to level valley. The east two tiers of sections are nearly 1000 ft. higher than the western part of the township. The south tier of sections is also several hundred feet higher than the northwestern part. The trend of the ridges and drainage of the hollows and canons is all toward the northwest corner of the township except a small portion in the southeastern part of the township which drains easterly.

Sub.T.31 S.,R.3 W.-Continued.

Chains

The soil is generally either sandy or gravelly loam with some clay and gravel. In the hollows and valleys the soil is more sandy with usually a clay or gravel subsoil, while on the ridges the soil has a tendency to be gravelly and mixed a good deal with rock. The geological formation is a volcanic overflow with occasional outcrops of sandstone and limestone,

On the higher ridges and hollows aspen and pine timber is abundant and much of ^{it} is suitable for saw timber; and on the lower ground (central part of the township) cedar and pinon pine timber is very dense. And in the extreme northwestern part of the township there is very little timber.

Sage brush is found in the lower parts of the township and deer brush and service berry in the higher parts.

There are quite a number of small springs and streams in the township which furnish ample water for stock watering purposes; and a ditch is taken out from Lost Creek in the western part of the township and the water used to irrigate farming land in Circle Valley 10 or 12 miles below.

There are no settlers in the township.

No mineral was discovered in the township.

John Stewart
 Deputy Stewart
 U.S. Transitmen.

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FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of transitmen see book "P" T. 52 S., R. 9 E.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191 _____



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18, 1914

The foregoing field notes of the survey of _____ the subdivisioanal lines of Township No. 51 South, Range No. 3 West of the Salt Lake Base and Meridian, Utah

executed by _____ John R. Stewart and Quinby Stewart _____
under ^{their} special instructions dated _____ March 27 _____, 1911, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

W. C. Thoresen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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Filed Jan. 26, 1912.

BOOK A-396

W.S.H.

P.S.

"L"

FIELD NOTES

OF THE SURVEY OF THE

SIXTH STANDARD PARALLEL SOUTH

Through

Ranges 9 and 10 East

Of the Salt Lake Base and Meridian,

in the State of Utah

EXECUTED BY

John R. Stewart

in the capacity of U. S. ^{Transition} Surveyor, under instructions dated March 27, 1911,

sued by the United States Surveyor General to govern surveys included in

group No. E, which were approved by the Commissioner of the General Land

Office, April 22, 1911, pursuant to authority contained in the Act of

Congress dated, 1911.

Survey commenced August 19, 1911

Survey completed August 21, 1911

6-25-11

INDEX DIAGRAM.

Township *Section* *Range*

1	2	3	4	5	6
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13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

Survey 6th Standard Parallel South, through R 9 E

Survey commenced, Aug. 19, 1911, and executed with a V. and P. E. Gurley's explorer's transit, No. 957, with solar attachment. The horizontal limb is provided with two double verniers placed opposite each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, March 29, 1911.

In examining the adjustments of the transit, and correct the level and collimation error, then to test the solar observations made during a. m. and p. m. hours, with a meridian established by Polaris observations, I proceed as follows:
At the cor. of T. 30 S. on 6th Standard Parallel South, bet. sec. 32 and 33,

R 9 E., which is an iron post, 3 ins. in dia., ^{marked and} witnessed as described:

by surveyor general, latitude $30^{\circ} 09' 30''$ N., longitude $110^{\circ} 54' 38''$ W.; I set off $38^{\circ} 09' \frac{1}{2}''$ N., on the lat. arc; $12^{\circ} 57'$ N., on the decl. arc; and, at 4 h. 4 m. p. m., l. m. t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5.00 chs. N. of the cor.

At 9 h. 43 m. p. m., l. m. t., I observe Polaris at eastern elongation, in accordance with the Manual, and mark a point in the line thus determined, by a tack driven in a wooden plug, set 5.00 chs. N. of cor.

August 19, 1911.

Survey 6th Standard Parallel South, through R. 9.

Chains

August 20, 1911. At 7 h. 40 m. a. m., l. m. t., I lay off the azimuth of Polaris, $1^{\circ} 29' 4''$ to the west, and mark the meridian thus determined, by a groove in the rock already set 5.00 chs. north of cor. This mark falls 0.28 ins. W. of the line determined by the solar.

At 8 h. 3 m. a. m., l. m. t., I set off $38^{\circ} 09' \frac{1}{2}''$ N., on the lat. arc; $12^{\circ} 42' 13''$ N. on the decl. arc; and mark a point on the meridian determined with the solar, by a cross on the stone, set 5.00 chs. N. of cor. This line is 0.32 ins. west of the meridian established by the Polaris observation. The solar apparatus, by p. m. and a. m. observations, defines positions for meridians, respectively about $0' 13''$ east and $0' 17''$ west of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 8 h. 3 m. a. m., is N. $16^{\circ} 20' 20''$ W.; the angle thus determined gives the mag. decl. $\therefore 16^{\circ} 20' E.$

I commence at the cor. of sec. 32 and 33, on 6th Standard Parallel South, R. 9 E.

Thence I run

East on S. side of sec. 33.

Over rolling mountainous country, through cedar and pinion pine timber and sage brush.

Acc.

Survey 6th Standard Parallel South, through R. 9 E

Chain

- 12.00 Top of knoll, 40 ft. above cor. brass
N. 76° and S. E.
Desc.
- 15.00 Bottom of swale, 20 ft. below knoll,
course S. 60° W. Asc.
- 23.30 Top of spur, 25 ft. above swale, brass
N. and S.
Desc.
- 27.00 Bottom of swale, 20 ft. below spur,
course S. 15° W. Asc.
- 34.00 Top of ridge, 30 ft. above swale, brass
N. 15° E. and S. 15° W.
Desc.
- Difference between measurements
of 40.00 chs., by two sets of chainmen,
is 6 lbs.; position of middle point
By first set, 40.03 chs.
By second set 39.97 chs.; the
mean of which is
- 40.00 Set an iron post, 3 ft. long, 1 in. in
dia., 26 ins. in the ground, for st $\frac{1}{4}$ sec.
cor., on S. side of sec. 33, mtd. on brass
cap. SC $\frac{1}{4}$ S 33 in N. half, from which
A cedar, 5 ins. in dia., brass
N. 30° E., 78 lbs. dist., mtd.
 $\frac{1}{4}$ S 33 BT.
- 50.00 Bottom of swale, 20 ft. below ridge,
course S. W.
Asc.
- Difference between measurements
of 80.00 chs., by two sets of chainmen,
is 3 lbs.; position of middle point
By first set, 79.99 chs.
By second set, 80.01 chs.; the
mean of which is
- 80.00 Set an iron post, 3 ft. long, 3 ins.
in dia., 24 ins. in the ground,
for st cor. of secs. 33 and 34, mtd.
on brass cap
SCT 30 S S 33 in N. W., and

Survey 6th Standard Parallel South, through R.

Chains

R 9 E S 34 in N. E. quadrant;

from which

A cedar, 4 ins. in dia., bears

N. 56° E., 246 lks. dist., marked.

T 30 S R 9 E S 34 BT.

A cedar, 5 ins. in dia., bears

N. 33° W., 100 lks. dist., marked.

T 30 S R 9 E S 33 BT.

Land, rolling mountainous.

Soil, sand, 18 ins. deep.

Subsoil, sand stone formation.

Timber, cedar and pinion pine.

Undergrowth, sage.

Good grass for grazing.

Rolling mountainous land or
land covered with timber or brush,
80.00 chs.

East on S. side of sec. 34.

Over rolling mountainous country,
through scattering cedar and pinion
pine timber.

11.00 Wash, 10 lks. wide, and 3 ft. deep,
course N. 20° W.

36.00 Wash, 20 lks. wide, and 4 ft. deep,
course N. 30° W.

Difference between measurements
of 40.00 chs., by two sets of chainmen,
is 5 lks.; position of middle point

By first set, 39.97½ chs.

By second set, 40.02½ chs.; the
mean of which is

40.00 Set an iron post, 3 ft. long, 1 in.
in dia., 18 ins. in the ground;
surrounded by a mound of earth
and stone, for st 1/4 sec. cor., on S. side
of sec. 34, marked on brass cap SC 1/4
S 34 in N. half, from which

Survey 6th Standard Parallel South, through R. 9

Chains

Acedar, 7 in. in dia., bears
N., 8.8 lbs. dist., mtd. $\frac{1}{4}$ S 34 BT.
46.00 Bottom of hollow, 3.5 ft. below sec.
cor. corner N. 30° W.

Asc.

49.00 Top of ridge, 30 ft. above hollow, bears
N. 20° W., and S. 20° E.

Desc.

61.00 Bottom of hollow, 20 ft. below ridge,
corner N. 30° W.

Asc.

68.00 Top of ridge, 150 ft. above hollow,
bears N. 20° W., and S. 20° E.

Desc.

74.00 Bottom of hollow, 140 ft. below
ridge, corner N. 20° W.

Asc.

Difference between measurements
of 80.00 chs., by two sets of chainmen
is 0 lbs.; position of middle point

By first set, 80.00 chs.

By second set, 80.00 chs.; the
mean of which is

80.00 Set an iron post, 3 ft. long, 3 in. in
dia., 24 ins. in the ground, for ^{st.} cor.
of secs. 34 and 35, mtd. on brass
cap

S 34 T 30 S 5 34 in N. W. and

R 9 E. S 35 in N. E. quadrants,

and raise a mound of stone, 2 ft.
base, $1\frac{1}{2}$ ft. high, N. of corner.

Land, mountainous, slopes and
drains northerly.

Soil, sand, 16 to 30 ins. deep.

Subsoil, gravel and sand stone
formation.

Timber, cedar and pinion pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land or land

Chains

covered with timber or brush,
20.00 chs.

East on S. side of sec. 35.

Over mountainous country; through scattering cedar and juniper pine timber.

Asc.

4.00 Top of ridge, 70 ft. above cor. leave
N. 40° W. and S. 40° E.

Desc.

11.00 Bottom of hollow, 80 ft. below ridge,
course N. W.

Asc.

21.00 Top of spur, 100 ft. above hollow,
leave N. 20° W. and S. 20° E.

Desc.

24.00 Bottom of hollow, 70 ft. below spur,
course N. 30° W.

Asc.

27.50 Top of ridge, 170 ft. above hollow,
leave N. 35° W. and S. 35° E.

Desc.

Difference between measurements
of 40.00 chs., by two sets of chainmen,
in 6 hrs.; position of middle point

By first set, 40.03 chs.

By second set, 39.97 chs.; the

mean of which is

40.00 Set an iron post, 3 ft. long, 1 in. in
dia., 20 ins. in the ground;

surrounded by a mound of earth
and stone, for ^{sq.} 1/4 sec. cor. on S. side
of sec. 35, mtd. on base cap

SC 1/4 S 35 in N. half; and raise a
mound of stone, 2 ft. base, 1 1/2 ft.

high N. of corner

45.00 Bottom of hollow, 150 ft. below

Survey 6th Standard Parallel South, through R. 9 E.

Chains

ridge, course N. 20° W.

Asc.

62.00 Top of arc, 50 ft. above hollow, bearing N. 60° W. and S. 60° E.

Desc.

75.00 Bottom of hollow, 60 ft. below top of arc., course N. 60° W.

Asc.

Difference between measurements of 80.00 chs., by two sets of chainmen, is 3 lbs.; position of middle point

By first set 79.98 1/2 chs.

By second set 80.01 1/2 chs.; the mean ^{of which is}

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 14 ins. in the ground, surrounded by a mound of earth and stone, for ^{sk} cor. of sec. 35 and 36, marked on brass cap

SC T305535 in N. W., and

R9E536 in N. E. quadrants;

and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

Land, mountainous; slopes and drains north westerly.

Soil, sandy loam, 14 to 20 ins. deep.

Subsoil, clay and sand stone formation.

Timber, cedar and pinion pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land or land covered with timber or brush,

80.00 chs.

August 19, 1911.

Aug. 21, 1911. At 8 hr. 3 m. a. m., l. m. t., I set off 38° 09 1/2' N., on the lat. arc; 12° 24' N., on the decl. arc; and

Survey 6th Standard Parallel South; through R. 9 E.

Chains

determine a meridian with the solar, at the cor. of secs. 35 and 36, on 6th Standard Parallel South, R. 9 E.

Thence run

East on S. side of sec. 36.

Over steep mountainous country; through sage brush.

Desc. gradually.

25.00 Enter cedar and pinion pine timber, bear N. and S.

Difference between measurements of 40.00 chs., by two sets of chainmen, is 1 lb.; position of middle point

By first set, 39.99 $\frac{1}{2}$ chs.

By second set, 40.00 $\frac{1}{2}$ chs.; the mean of which is

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., on S. side of sec. 36, mtd. on brass cap S C $\frac{1}{4}$ S 36 in N. half; from which

A cedar, 5 ins. in dia., bears

N. 40° 26', 65 lbs. dist., mtd.

$\frac{1}{4}$ S. 36 B.T.

55.00 Bottom of hollow, 80 ft. below sec. cor., course N. 30° E.

Asc.

57.50 Top of spur, 30 ft. above hollow, bears N. 30° E. and S. 30° 26'.

Desc.

65.00 Bottom of cañon, 160 ft. below spur, course N. 30° 26'.

70.00 Asc., bears N. and S.

Leave cañon.

Difference between measurements of 80.00 chs., by two sets of chainmen, is 2 lbs.; positions of middle point

By first set, 80.01 chs.

By second set, 79.99 chs.; the

Chain.

mean of which is

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground, surrounded by a mound of earth and stone, for cor. of T. 30 S. R. 9 and 10 E., on 6th Standard Parallel South, mtd. on brass cap

SCT 30 SR 9 E S 36 in N. W., and

R 10 E S 31 in N. E. quadrants;

and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.:

Land, steep mountainous, slopes and drains northerly.

Soil, sand 12 to 18 ins. deep.

Subsoil, clay.

Timber, cedar and pinion pine undergrowth, sage.

Good grass for grazing.

Mountainous land or land covered with timber or brush, 80.00 ch.

East on the S. side of sec. 31.

Over mountainous country; through cedar and pinion pine timber and sage brush.

Asc.

24.00 Top of ridge, 70 ft. above cor., bears N. 40° W. and S. 40° E.

Desc.

30.00 Bottom of hollow, 100 ft. below ridge, course N. 60° W.

Asc.

34.00 Top of spur, 20 ft. above hollow, bears N. 60° W. and S. 60° E.

Desc.

35.00 Bottom of hollow, 35 ft. below spur course N. 60° W.

Asc.

Survey 6th Standard Parallel South, through R.

Chains

Difference between measurements of 40.00 chs., by two sets of chainmen, is 2 lbs.; position of middle point

By first set, 39.99 chs.

By second set, 40.01 chs.; the mean of which is

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 19 ins. in the ground, surrounded by a mound of earth and stone, for st 1/4 sec. cor., on S. side of sec. 31, mtd. on base cap S C 1/4 S 31 in N. half; from which a pinion pine, 6 ins. in dia., bears N. 71° E., 58 lbs. dist., mtd. 1/4 S 31 B.T.

46.00 Top of ridge, 50 ft. above hollow, bears N. 70° W. and S. 70° E.

Desc.

55.50 Bottom of hollow, 40 ft. below ridge, course N. 60° W.

Asc.

64.00 Top of ridge, 35 ft. above hollow, bears N. 60° W. and S. 60° E.

Desc.

65.50 Bottom of hollow, 30 ft. below ridge, course N. 60° W.

Asc.

Difference between measurements of 80.00 chs., by two sets of chainmen, is 6 lbs.; position of middle point

By first set, 80.03 chs.

By second set, 79.97 chs.; the mean of which is

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 14 ins. in the ground, surrounded by a mound of earth and stone, for st cor. of secs. 31 and 32, mtd. on base cap S C T 30 S S 31 in N. W. and R 10 E S 32 in N. E. quadrants;

Chains

from which

A pinion pine, 6 ins. in dia., bear
N. 36° E., 16 lbs. dist., mkd.

T. 30 S. R. 10 E. S. 32 B. T.

A cedar, 6 ins. in dia., bear
N. 26° W., 27 lbs. dist., mkd.

T. 30 S. R. 10 E. S. 31 B. T.

Land, mountainous, slopes and drains
north westerly.

Soil, sandy loam, 8 to 14 ins. deep.

Subsoil, conglomerate or gravel.

Timber, cedar and pinion pine.

Undergrowth, sage.

A little grass for grazing.

Mountainous land or land
covered with heavy timber or brush,
80.00 chs.

Aug. 21, 1911: At this cor. set off
12⁶/₁₉ ft. on the decl. arc; and at
0 h. 03 m. p. m., l. m. t., observe
the sun on the meridian; the
resulting lat. is 38° 10' N., which is
the proper lat. nearly.

East on the S. side of sec. 32.

Over mountainous country;
through heavy cedar and pinion
pine timber and sage brush.
Asc.

22.50 Top of ridge, 30 ft. above cor. bear
N. 60° W. and S. 60° E.

Desc.

25.00 Bottom of hollow, 35 ft. below
ridge, course N. 50° W.

Asc.

Difference between measurements
of 40.00 chs., by two sets of chainmen,
is 7 lbs.; position of middle point

Survey 6th Standard Parallel South, through R.

Chains.

By first set, 40.03 $\frac{1}{2}$ chs.By second set, 39.96 $\frac{1}{2}$ chs.; the
mean of which is

40.00 Set an iron post, 3 ft. long, 1 in. in
dia., 26 ins. in the ground, for st $\frac{1}{4}$ sec.
cor. on S. side of sec. 32, mtd. on
brass cap S C $\frac{1}{4}$ S 32 in N. half;
from which

A pinion pine, 4 ins. in dia.,
bear N. 12° E., 47 lbs. dist., mtd.
 $\frac{1}{4}$ S 32 BT.

54.00 Top of ridge, 40 ft. above hollow, bear
N. 20° and S. E.

Desc.

60.00 Bottom of hollow, 30 ft. below ridge,
course N. 20°.

Asc.

78.00 Top of ridge, 50 ft. above hollow, bear
N. 40° 20' and S. 40° E.

Desc.

Difference between measurements
of 80.00 chs., by two sets of chainmen,
is 4 lbs.; position of middle point

By first set, 79.98 chs.

By second set, 80.02 chs.; the
mean of which is

80.00 Set an iron post, 3 ft. long, 3 ins. in
dia., 14 ins. in the ground,
surrounded by a mound of earth
and stone, for st cor. of secs. 32 and 33,
mtd. on brass cap

S C T 30 S S 32 in N. 20° and
R 10 E S 33 in N. E. quadrants;

from which

A pinion pine, 6 ins. in dia.,
bear N. 33° E., 220 lbs. dist., mtd.

T 30 S R 10 E S 33 BT.

A pinion pine, 6 ins. in dia.,
bear N. 42° 20', 98 lbs. dist., mtd.

T 30 S R 10 E S 32 BT.

Survey 6th Standard Parallel South, through R. 10E.

Chains

Land, mountainous, steep and
drains north westerly.

Soil, sandy loam, 6 ins. deep.

Subsoil, conglomerate rock and
gravel.

Timber, cedar and pinion pine.

Undergrowth, sage.

A little grass.

Mountainous land or land
covered with heavy timber or brush,
80.00 acres.

August 31, 1911.

John R. Stewart

Instrumentman E. S. O.

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Page

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of _____

showing the respective capacities in which they acted:

- _____, *Chainman.*
- _____, *Chainman.*
- _____, *Moundman.*
- _____, *Moundman.*
- _____, *Asman.*
- _____, *Asman.*
- _____, *Flagman.*

or certificate of assistants see book "P" T. 32 S., R. 9 E.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

_____, United States Deputy Surveyor, in surveying all

those parts or portions of the _____

_____ of the _____

_____ meridian, _____ of _____, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for _____

- _____, *Chainman.*
- _____, *Chainman.*
- _____, *Moundman.*
- _____, *Moundman.*
- _____, *Asman.*
- _____, *Asman.*
- _____, *Flagman.*

Subscribed and sworn to before me this _____ day of _____, 19 _____



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 19 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of transitman see book "P" T.32 S., R.9 E.

_____ of the _____ meridian; in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 19 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18 _____, 19 14.

The foregoing field notes of the survey of _____ the Sixth Standard Parallel South through Ranges 9 and 10 East of the Salt Lake Base and Meridian, Utah,

executed by _____ John R. Stewart _____
under his special instructions _____, dated _____ March 27, _____, 19 11 having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

[Signature]
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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BOOK A-396

Filed January 30, 1918.

" M "

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FIELD NOTES

OF THE SURVEY OF THE

SOUTH AND EAST BOUNDARIES

OF

TOWNSHIP 31 SOUTH, RANGE 9 EAST.

Of the Salt Lake Base and Meridian,

In the State of Utah

EXECUTED BY

QUINBY STEWART

In the capacity of U. S. ~~Surveyor~~ ^{Transitman}, under instructions dated March 27, 1911,

issued by the United States Surveyor General to govern surveys included in Group No. 8, which were approved by the Commissioner of the General Land

Office, April 22, 1911, pursuant to authority contained in the Act of Congress dated, 1911.

Survey commenced August 19, 1911.

Survey completed August 23, 1911.

INDEX DIAGRAM.

Township 31 S., Range 2 E.

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Survey commenced August 19, 1911, and executed with a Kenffel and Esser mountain transit, No. 20578, with solar attachment. The horizontal limb is provided with two verniers placed opposite each other, reading to single minutes of arc; which is also the least count of the lat. and decl. arcs.

The instrument was examined tested on the meridian at Salt Lake City, found correct and was approved by the Surveyor General for Utah, March 20, 1911.

I examine the adjustments of the instrument, and correct the level and collimation errors; then to test the solar observations made during a. m. and p. m. hours, with a meridian established by Polaris observations I proceed as follows:-

At the cor. of T. 31 and 32 S. R. 8 and 9 E., which is an iron post, 3 in. in dia. marked and witnessed as described by the Surveyor General, latitude $38^{\circ} 04' 17''$ N., longitude $111^{\circ} 01' 12''$ W., I set off $38^{\circ} 04'$ N. on the lat. arc; $12^{\circ} 56'$ N. on the decl. arc; and at 4 h. 4 m. p. m., a. m. t., determine a meridian with the solar; and mark a point thereof, on a stone set firmly in the ground. 5.05 chs. N. of cor.

at 9 h. 43 m. p. m. limit, I observe Polaris at eastern elongation, in accordance with the Manual, and mark

Survey South Boundary, T 31 S R 9 E continue

chains a point in the line thus determined by a tack driven in a wooden plug set 5.00 chs N. of cor.

The magnetic bearing of the true meridian at 8 h. 30 m a. m. is $16^{\circ} 15' N.$; the angle thus determined gives the magnetic decl. $16^{\circ} 15' E.$

East bet. sec. 6 and 31.

Over nearly level bench land covered with cedar and pinon pine timber and sage brush.

Asc.

75. Top of ridge, 75 ft. above cor bears $N. E.$ and $S. N.$

Desc.

10.00 Wash, 130 lbs. wide, 10 ft. deep course $N. 10^{\circ} E.$

28.00 Wash, 48 lbs. wide, 10 ft. deep course $N. 75^{\circ} N.$

37.74 Set an iron frost 3 ft. long, 1 in. in dia, 26 ins. in the ground, for $\frac{1}{2}$ sec. cor. mkd., on brass cap $\frac{1}{4}$ S. 31 in. $N.$ half and $S. 6$ in $S.$ half from which

A cedar, 13 ins. in dia, bears $N. 49^{\circ} N.$ 45 lbs. dist mkd. $\frac{1}{4}$ S. 31 B. T.

A cedar, 12 ins. in dia, bears $S. 10^{\circ} N.$ 166 lbs. dist

Survey South Boundary. T. 91 S. R. 9 E. Continued

Chains.

marked $1/4$ S 6 B.T.

40.50 Wire and pole fence, bears N. and S.

77.74 Set an iron post, 3 ft. long, 3 ins. in dia., 3 1/4 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked on brass cap.

T. 91 S. S. 3.1 in N. 26.

R. 9 E. S. 3.2 in N. E.

S. 5 in S. E. and

T. 92 S. S. 6 in S. W. quadrant;

from which,

A cedar, 8 ins. in dia.,

bears S. 15° E., 20 lbs. dist.,

marked T. 92 S. R. 9 E. S. 5 B.T.

A cedar, 8 ins. in dia.,

bears S. 39° W., 6.3 lbs. dist.,

marked T. 92 S. R. 9 E. S. 6 B.T.

No other trees within limits therefore I dig pits 18 x 18 x 12 ins. in sec. 31 and 32, 5 ft. from post, and raised a mound of earth.

4 ft. base, 2 1/2 ft. high. W. of cor. Sand, loess, gentle slope westerly. Soil, sandy loam.

Subsoil, clay and gravel.

Timber, cedar and pinion pine.

Undergrowth, sage.

A little grass.

Bench land, covered with cedar and pinion pine timber or brush, 77.74 chs.

Aug. 19, 1911: At this cor. I set off $12^{\circ} 59'$ N. on the decl. arc, and at 0° to 4 m. p.m., l. m. t., observe the sun on the meridian; the resulting lat. is $38^{\circ} 04' 1/2$ which is the proper lat. nearly.

Chains:

- East bet secs. 5 and 32.
Over bench land; through greasewood and sage brush.
- 40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cov. mtd. on brass cap; $\frac{1}{4}$ S. 32 in N. half and S. 5 in S. half; dig pits 18 x 18 x 12 ins. E. and W. of post 3 ft. dist., and raised a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.:
- 41.00 Pass 3 chs. S. of S. W. cor. of cultivated strip, claimed by Ben Baker and Geo. Coleman.
- 79.40 Wash, 5 lbs. wide, 2 ft. deep, course S. 30° W.
- 80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 31 ins. in the ground, surrounded by a mound of earth and stone, for cov. of secs. 4, 5, 32 and 33, mtd. on brass cap;
T31 S. 5 32 in N. W.
R 9 E S. 33 in N. E.
S 4 in S. E. and
T32 S. 5 5 in S. W. quadrants;
and raised a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.:
Land, smooth bench, slopes gently to west.
Soil, rich sandy loam, 6 ft. deep, 1st rate, soft texture.
Subsoil, gravel.
No timber.
Undergrowth, sage and greasewood.
Good grass for grazing.
Bench land or land covered with brush, 80.00 chs.

Survey South Boundary, T 31 S, R 9 E. Continued

Chains

East bet. sec. 4 and 33.

Over brush land; through quercus and sage brush.

35.00 Asc. bears N. E. and S. W.

Leave brush

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mtd. on brass cap; $\frac{1}{4}$ S 33 in N. half and S 4 in S. half; and raised a mound of stone, 2 ft. base $1\frac{1}{2}$ ft. high, N. of post.

41.75 Top of ridge, 175 ft. above sec. cor. bears N. 20° E. and S. 20° W.

Desc.

44.00 Bottom of hollow, 175 ft. below ridge, course S. 20° W.

Asc.

46.00 Top of ridge, 180 ft. above hollow, bears N. 20° E. and S. 20° W.

Enter cedar and pinion pine timber, bears N. 20° E. and S. 20° W.

Desc.

66.00 Bottom of hollow, 170^{ft} below ridge, course S. 15° W.

Asc.

67.00 Top of ridge, 100 ft. above hollow, bears N. and S.

Desc.

70.00 Wash, 5 lbs. wide, 4 ft. deep, course S. 20° W.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground; surrounded by a mound of earth and stone, for cor. of secs. 3, 4, 33 and 34, mtd. on brass cap;

T 31 S S 33 in N. W.

R 9 E S 34 in N. E.

S 3 in S. E. and

T 32 S S 4 in S. W. quadrants;

from which,

A pinion pine, 7 ins. in dia.,

Survey South Boundary, T. 31 S. R. 9 E. Contd.

Chains

bears N. 60° E., 95 lks. dist.,
mkd. T. 31 S. R. 9 E. S. 34 B.T.

A cedar, 6 ins. in dia.,
bears S. 40° E., 63 lks. dist.,
mkd. T. 32 S. R. 9 E. S. 3 B.T.

A pinion pine, 8 ins. in dia.,
bears S. 40° W., 89 lks. dist.,
mkd. T. 32 S. R. 9 E. S. 4 B.T.

A cedar, 6 ins. in dia.,
bears N. 48° W., 13 lks. dist.,
mkd. T. 31 S. R. 9 E. S. 3 B.T.

Land, W. 35 chs. over bench land,
slopes gently to west.

Land, E. 45 chs. mountainous.

Soil, W. 35 chs. rich sandy loam,
6 ft. deep, 1st rate, soft texture.

Soil, E. 45 chs. sandy loam, 6 ins.
deep.

Subsoil, gravel.

Timber, cedar and pinion pine.

Undergrowth, greasewood and sage
Good grass.

Mountainous or bench land or
land covered with timber or brush,
80.00 chs.

Aug. 19, 1911.

Aug. 21, 1911: At 8 h. 3 m. a. m., 1
m. N., I set off 38° 04' N., on the lat.
arc; 12' 23' N. on the decl. arc, and
determine a meridian with the
solar, at the cor. of secs. 3, 4, 33
and 34, on S. bdy. of T.

Hence run,

East bet. secs. 3 and 34.

Over mountainous country;
through heavy cedar and pinion
pine timber.

Desc.

Surrey South Boundary T 31 S R 9 E. Continued

Chains

6.00 Bottom of hollow, 100 ft. below
on course S.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in
dia., 20 ins. in the ground,
surrounded by a mound of
earth and stone, for $\frac{1}{4}$ sec. cor.
mkd. on brass cap, $\frac{1}{4}$ S 34 in
N. half and S 3 in S. half; from
which,

A pinion pine, 5 ins. in dia.,
bears N. 30° W., 44 lbs. dist.

mkd. $\frac{1}{4}$ S 34 BT.

A pinion pine, 6 ins. in dia.,
bears S. 85° W., 20 lbs. dist.,

mkd. $\frac{1}{4}$ S 3 BT.

50.00 Top of ridge, 150 ft. above hollow,
bears N. 35° W. and S. 35° E.

Desc.

54.00 Bottom of hollow, 100 ft. below ridge,
course N. 50° W.

Asc.

73.00 Top of ridge, 100 ft. above hollow,
bears N. W.

Desc.

80.00 Set an iron post, 3 ft. long, 3 ins.
in dia., 17 ins. in the ground,
surrounded by a mound of earth
and stone, for cor. of secs. 2, 3,
34 and 35, mkd. on brass cap;

T 31 S 5 34 in N. W.

R 9 E 5 35 in N. E.

S 2 in S. E. and

T 32 S 5 3 in S. W. quadrants;

from which,

A pinion pine, 4 ins. in dia.,
bears N. 20° E., 65 lbs. dist.,

mkd.

T 31 S R 9 E 5 35 BT.

A cedar, 6 ins. in dia.,
bears S. 41° E., 62 lbs. dist.,

Chains.

mkd. T 32 S R 9 E S 2 B T.

A juniper pine, 16 ins. in dia.,
 bears S. 50° W., 70 lbs. dist.,

mkd. T 32 S R 9 E S 3 B T.

A juniper pine, 12 ins. in dia.,
 bears N. 70° W., 68 lbs. dist.,

mkd. T 31 S R 9 E S 3 H B T.

Land, mountainous, slopes and
 drains southerly.

Soil, sandy loam.

Subsoil, gravel and clay.

Timber, cedar and juniper pine.

Undergrowth, sage.

A little grass.

Mountainous land or land,
 covered with timber or brush,
 80.00 chs.

Aug. 21, 1911: At this cor. I set off
 12.020' N. on the decl. arc; and at
 3 h. 3 m. p. m., l. m. t., observe
 the sun on the meridian; the
 resulting lat. is 38° 04' N. which
 is the proper lat. nearly.

East lat. secv. 2 and 35.

Over mountainous country;
 through cedar and juniper pine
 timber and sage brush.

Wesc.

6.00 Wash, 30 lbs. wide, 2 ft. deep, course
 N. 30° W.

40.00 Set an iron post, 3 ft. long, 1 in. in
 dia., 26 ins. in the ground, for 1/4
 sec. cor. mkd. on brass cap; 1/4 S
 35 in N. half and S 2 in S. half,
 from which;

A cedar, 6 ins. in dia.,
 bears N. 20° E., 19 lbs. dist.,
 mkd. 1/4 S 35 B T.

Survey South Boundary T. 31 S. R. 9 E. Continued.

Chains

A cedar, 7 ins. in dia.,
 bears S. 10° E., 19 lks. dist.,
 mkd. 1/4 S. 2 B.T.
 52.00 Bottom of South Creek, 6 lks.
 wide, 2 ins. deep, 200 ft. below
 sec. cor. course N. 50° W.
 Asc.

71.00 Top of ridge, 60 ft. above creek,
 bears N. 10° E. and S. 10° W.
 Desc.

80.00 Set an iron post, 3 ft. long, 3 ins.
 in dia. 24 ins. in the ground,
 for cor. of sec. 1, 2, 35 and 36,
 mkd. on brass cap,
 T 31 S 5 35 in N. W.
 R 9 E 5 36 in N. E.
 S 1 in S. E. and
 T 32 S 5 2 in S. W. quadrants;
 from which.

A cedar, 6 ins. in dia.,
 bears N. 67° E., 91 lks. dist.,
 mkd. T 31 S R 9 E 5 36 B.T.

A pinion pine, 7 ins. in dia.,
 bears S. 78° E., 65 lks. dist.,
 mkd. T 32 S R 9 E 5 1 B.T.

A pinion pine, 6 ins. in dia.,
 bears S. 54° W., 13 lks. dist.,
 mkd. T 32 S R 9 E 5 2 B.T.

A cedar, 6 ins. in dia.,
 bears N. 47° W., 40 lks. dist.,
 mkd. T 31 S R 9 E 5 35 B.T.

Land, mountainous, slopes and
 drains north westerly.

Soil, sandy loam.

Subsoil, clay and gravel.

Timber, cedar and pinion pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land or land
 covered with timber or brush,

80.00 chs.

Survey South Boundary T. 31 S. R. 9 E. Contin.

Chains

East bet. sec. 1 and 36.

Over mountainous country; through cedar and fir and pine timber.

36.00 Asc.

36.00 Top of ridge, 10 ft. above cor. bears N. 50° W. and S. 50° E.

Desc.

37.50 Bottom of hollow, 50 ft. below ridge, course S. 20° W.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground, surrounded by a mound of earth and stone, for $\frac{1}{4}$ sec. cor. mtd. on brass cap; $\frac{1}{4}$ S 36 in N. half and S 1 in S. half; from which,

A cedar, 8 ins. in dia., bears N. 36° E., 38 lbs. dist., mtd. $\frac{1}{4}$ S 36 B.T.

A fir and pine, 5 ins. in dia., bears S. 44° E., 10 lbs. dist., mtd. $\frac{1}{4}$ S 1 B.T.

74.00 Top of ridge, 75 ft. above hollow, bears N. 20° E. and S. 20° W.

Desc.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 16 ins. in the ground, surrounded by a mound of earth and stone, for cor. of T's. 31 and 32 S. R's. 9 and 10 E. mtd. on brass cap;

T 31 S 5 36 in N. W.

R 10 E S 31 in N. E.

T 32 S 5 6 in S. E. and

R 9 E S 1 in S. W. quadrants;

from which,

A fir and pine, 6 ins. in dia., bears N. 25° E., 39 lbs. dist., mtd. T 31 S R 10 E S 31 B.T.

A fir and pine, 6 ins. in dia., bears S. 17° E., 11 lbs. dist.,

Survey South Boundary T. 31 S. R. 9 E. Continued

Chain

marked T. 32 S. R. 10 E. S. 6. B.T.

A cedar, 6 in. in dia.,
lean S. 45° W., 67 lbs. dist.,

marked T. 32 S. R. 9 E. S. 1 B.T.

A fir or pine, 5 in. in dia.,
lean N. 82° W., 24 lbs. dist.,

marked T. 31 S. R. 9 E. S. 3. B.T.

Soil, mountainous.

Soil, sandy loam.

Subsoil, gravel.

Timber, cedar and fir or pine.

Undergrowth, thicket.

Good grass for grazing.

Mountain meadow or land

covered with timber or brush,

etc. etc.

Aug. 31, 1911.

Aug. 29, 1911: At S. 6. 3 in. diam. l.
marked S. 6. 3 in. diam. l. on the lat.
line, 13° 13' N. on the decl. arc, and
determine a meridian with the
solar, at the cor. of T. 31 S. R. 9 E. S.
R. 9 and 10 E.

Thence S. 3 in.
North on E. ldy. of T. 31 S. R. 9 E. S. 3
and 36.

Over mountainous country
through dense cedar and fir or
pine timber and thicket. Bush
etc.

85.00 Top of ridge, 210 ft. above cor. lean
N. 80° E. and S. 80° W.

Rise.

87.00 Bottom of hollow, 215 ft. below
ridge, course S. 75° W.

Run.

Sunny East Boundary T. 91 S. R. 9 E.

Claims.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 18 in. in the ground, surrounded by a mound of earth and stone for $\frac{1}{4}$ sec. cor. mtd. on brass cap, $\frac{1}{4}$ S 36 in W. half and S 31 in E. half, from which,
 A cedar, 6 in. in dia., bears S. 85° E., 17 lbs. dist., mtd.
 $\frac{1}{4}$ S 31 B.T.
 A pinion pine, 6 in. in dia., bears S. 30° W., 15 lbs. dist., mtd.
 $\frac{1}{4}$ S 36 B.T.

41.00 Top of ridge, 250 ft. above hollow, bears E. and W.

Desc.

46.00 Bottom of hollow, 225 ft. below ridge, course N. 85° W.

Asc.

62.00 Top of ridge, 250 ft. above hollow, bears E. and W.

Desc.

64.50 Bottom of hollow, 200 ft. below ridge, course N. 75° W.

Asc.

76.00 Top of ridge, 100 ft. above hollow, bears N. 80° W.

Desc.

81.00 Set an iron post, 3 ft. long, 3 in. in dia., 17 in. in the ground, surrounded by a mound of earth and stone, for cor. of sec. 25, 30, 31 and 36 mtd. on brass cap,

T 91 S S 25 in N. W.

R 10 E. S 30 in N. E.

S 31 in S. E. and

R 9 E S 36 in S. W. quadrants;

from which,

A cedar, 12 in. in dia., bears N. 46° E., 4 lbs. dist., mtd.

T 91 S R 10 E S 30 B.T.

A pinion pine, 8 in. in dia.,

Survey East Boundary T. 31 S. R. 9 E. Continued

Chain

Course S. 32° E., 17 lbs. dist. marked.

T. 31 S. R. 10 E. S. 31 B.T.

A. pinion pine, 10 ins. in dia.,
 Course S. 59° W., 70 lbs. dist. marked.

T. 31 S. R. 9 E. S. 36 B.T.

A. pinion pine, 5 ins. in dia.,
 Course N. 72° W., 22 lbs. dist. marked.

T. 31 S. R. 9 E. S. 25 B.T.

Land, mountainous.

Soil, sandy loam.

Subsoil, gravel and clay.

Timber, cedar and pinion pine.

Undergrowth, black sage.

Good grass for grazing.

Mountainous land or land
 covered with timber or brush,
 80.00 chs.

Aug. 22, 1911: At this cor. I set
 off 11° 59' N. on the decl. arc; and
 at 0 h. 3 m. p. m., h. on. t., observe
 the sun on the meridian; the
 resulting lat. is 38° 05' N. which is
 the proper lat. nearly.

North bet. secs. 25 and 30.

Over mountainous country;
 through heavy cedar and pinion
 pine timber and dense black
 sage brush.

Desc.

1.00 Bottom of hollow, 20 ft. below cor.
 course N. 80° W.

Asc.

2.00 Top of ridge, 75 ft. above hollow, course
 E. and W.

Desc.

9.00 Bottom of hollow, 75 ft. below
 ridge, course S. 40° W.

Asc.

14.

Survey East Boundary T 31 S. R. 9 E. Cor.

Chains.

38.50 Top of ridge, 500 ft. above hollow, bear
S. 60° E. and N. 60° W.

Desc.

40.00 Set an iron post, 3 ft. long, 1 in in
dia., 26 ins. in the ground, for
1/4 sec. cor. mtd. on brass cap;
1/4 S 25 in W. half and S 30 in E
half; from which,

A juniper pine, 8 ins. in dia.,
bear S. 50° E., 46 lks. dist., mtd.
1/4 S 30 B.T.

A cedar, 14 ins. in dia., bear
N. 52° W., 65 lks. dist., mtd.
1/4 S 25 B.T.

43.00 Leave timber, bear N. 60° W. and
S. 60° E.

80.00 Set an iron post, 3 ft. long, 3 ins.
in dia., 30 ins. in the ground;
surrounded by a mound of
earth and stone, for cor. of sec.
19, 24, 25 and 30 mtd. on brass
cap.

T 31 S. S. 24 in N. W.
R 10 E S 19 in N. E
S 30 in S. E. and
R 9 E S 25 in S. W. quadrants;

and raised a mound of stone, 2 ft.
base; 1 1/2 ft. high, W. of post.

Land, mountainous

Soil, sand and black loam.

Subsoil, gravel

Timber, cedar and juniper pine.

Undergrowth, black sage.

Good grass for grazing.

Mountainous land or land
covered with timber or brush,

80.00 chs.

Survey East Boundary T. 31 S. R. 9 E. Continued

Chains

North bet. sees 19 and 24.

Over rough mountainous country; through oak and service-berry brush.

5.00 Enter timber, bears E and W.

20.25 Bottom of Dugout Creek, 3 lks. wide, 2 ins. deep, clear water, 300 ft. below cor. course N. 68° W.

Asc.

30.00 Top of ridge, 200 ft. above creek, bears N. 60° W. and S. 60° E.

Desc.

34.50 Bottom of hollow, 200 ft. below ridge, course N. 60° W.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor. mtd. on brass cap $\frac{1}{4}$ S. 24 in W. half and S. 19 in E. half, from which,

A pinion pine, 10 ins. in dia., bears S. 5° W., 10 lks. dist., mtd.

$\frac{1}{4}$ S. 24 B.T.

A cedar, 11 ins. in dia., bears S. 50° E., 75 lks. dist., mtd.

$\frac{1}{4}$ S. 19 B.T.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 20 ins. in the ground; surrounded by a mound of earth and stone, for cor. of sees. 13, 18, 19 and 24, mtd. on brass cap

T. 31 S. 5 13 in N. W.

R. 10 E. S. 18 in N. E.

S. 19 in S. E. and

R. 9 E. S. 24 in S. W. quadrants;

from which

A pinion pine, 13 ins. in dia., bears N. 52° E., 71 lks. dist., mtd.

T. 31 S. R. 10 E. S. 18 B.T.

A pinion pine, 14 ins. in dia., bears S. 65° E., 47 lks. dist., mtd.

T. 31 R. 10 E. S. 19 B.T.

Survey East Boundary T31S R9E Cont.

Claims

A cedar, 10 in. in dia., base
S. 41° 26', 59 lbs. dist., marked
T31S R9E S34 BT.

A juniper pine, 12 in. in dia., base
N. 51° 26', 67 lbs. dist., marked.
T31S R9E S13 BT.

Land, mountainous.

Soil, sand and black loam.

Subsoil, gravel.

Timber, cedar and juniper pine.

Undergrowth, oak and surrounding.

Good grass for grazing.

Mountainous land or land
covered with timber or brush,
80.00 acres.

July 23, 1911.

Aug. 23, 1911: At 8 to 9 p.m. a.m.,
L. sur. t., I set off 38° 07' N., on the
lat. arc; 11° 43' N. on the decl. arc;
and determine a meridian with
the solar, at the cor. of sec. 13, 18,
19 and 34.

Thence down

North lat. sec. 13 and 18.

Over mountainous country;

through cedar and juniper pine
timber and sage brush.

Asc.

6.00 Top of ridge, 40 ft. above cor. base
E and W.

Desc.

9.10 Bottom of hollow, 80 ft. below
ridge, corner W.

Asc.

33.00 Top of ridge, 200 ft. above hollow,
base N. 70° W. and S. 70° E.

Desc.

39.00 Bottom of hollow, 150 ft. below

Survey East Boundary T 31 S. R. 9 E. Continued.

Chains

ridge, course N. 80° W.
Asc.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground, surrounded by a mound of earth and stone, for $\frac{1}{4}$ sec. cor. mtd. on brass cap; $\frac{1}{4}$ S. 13 in W. half and S. 18 in E. half; from which,

A cedar, 8 ins. in dia., bears N. 85° E., 16 lbs. dist., mtd. $\frac{1}{4}$ S. 18 B.T.

A fir or pine, 10 ins. in dia., bears S. 85° W., 54 lbs. dist., mtd. $\frac{1}{4}$ S. 13 B.T.

55.00 Top of ridge, 90 ft. above hollow, bears N. 60° W. and S. 60° E.
Desc.

65.00 Bottom of swale, 130 ft. below ridge, course N. 70° W.
Asc.

73.00 Top of ridge, 400 ft. above swale, bears N. 30° W. and S. 30° E.
Desc.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground, surrounded by a mound of earth and stone, for cor. of secs. 7, 12, 13 and 18, mtd. on brass cap,
T 31 S 5 12 in N. W.
R 10 E S 7 in N. E.
S 18 in S. E. and
R 9 E S 13 in S. W. quadrants;
from which

A fir or pine, 10 ins. in dia., bears N. 32° E., 152 lbs. dist., mtd. T 31 S R 10 E S 7 B.T.

A fir or pine, 9 ins. in dia., bears S. 23° E., 74 lbs. dist., mtd. T 31 S R 10 E S 18 B.T.

A fir or pine, 5 ins. in dia.,

Survey East Boundary T31 S. R. 9 E. Cont.

Chains

bears S. 24° W., 32 lbs. dist.,
 mtd. T31 S R 9 E S 13 BT.

A young pine, 5 ins. in dia.,
 bears N. 18° W., 17 lbs. dist.,
 mtd. T31 S R 9 E S 12 BT.

Land, mountainous.

Soil, sand and black loam.

Subsoil, gravel.

Timber, cedar and pinion pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land or land
 covered with timber or bushes,
 80.00 chs.

Aug. 23, 1911: At this cor. Set off
 1139' N. on the decl. arc; and
 at 0 h. 3 m. p. m., l. m. t., observe
 this sun on the meridian; the
 resulting lat. is 38° 08' N. which
 is the proper lat. nearly.

North lat. secs. 7 and 12.

Over mountainous country;
 through cedar and pinion pine
 timber.

Wesc.

19.00 Bottom of cañon, 400 ft. below
 cor. course N. 60° W.

Asc.

23.00 Top of spur, 70 ft. above cañon,
 bears N. 70° W. and S. 70° E.

Wesc.

30.00 Bottom of swale, 40 ft. below spur,
 course N. 70° W.

Asc.

40.00 Set an iron post, 3 ft. long, 1 in.
 in. dia., 19 ins. in the ground,
 surrounded by a mound of earth
 and stone, for 1/4 sec. cor. mtd.

Survey East Boundary T. 91 S. R. 9 E. Continued.

Stems

on brass cap, $1\frac{1}{4}$ S 19 in N. half
and S 7 in E. half, from which
A juniper pine, 11 ins. in dia.,
leans S. 15° E., 36 lbs. dist.,
marked. $1\frac{1}{4}$ S 7 B T.

A juniper pine, 8 ins. in dia.,
leans S. 68° W., 38 lbs. dist.,
marked. $1\frac{1}{4}$ S 12 B T.

50.00 Top of ridge, 337 ft. above sea level,
leans N. 65° W. and S. 65° E.

Desc.

50.00 Set an iron post, 8 ft. long, 3
ins. in dia., 17 ins. in the ground,
surrounded by a mound of earth
and stone, fence of rods. 1, 6,
7 and 12, marked on brass cap;

T 31 S S 1 in N. W.

R 10 E S 6 in N. E.

S 7 in S. E. and

R 9 E S 12 in S. W. quadrants;

from which,

A juniper pine, 5 ins. in dia.,
leans N. 34° E., 27 lbs. dist.,
marked. T 31 S R 10 E S 6 B T.

A juniper pine, 4 ins. in dia.,
leans S. 41° E., 3 lbs. dist.,
marked. T 31 S R 10 E S 7 B T.

A juniper pine, 4 ins. in dia.,
leans S. 30° W., 4 lbs. dist.,
marked. T 31 S R 9 E S 12 B T.

A juniper pine, 7 ins. in
dia., leans N. 36° W., 60 lbs. dist.,
marked. T 31 S R 9 E S 1 B T.

Land, mountainous.

Soil, sand and black loam.

Subsoil, gravel.

Timber, cedar and juniper pine.

Undergrowth, none.

Good grass for grazing.

Mountainous land or land
covered with timber, 80.00 also.

Sunny East Boundary 731 S. R. 9 E. Cont.

Chains

North lat. sec. 1 and 6.

Over mountainous country; through cedar and pine fire timber.

Here.

17.50 Bottom of hollow, 41 ft. below course N. 57° W.

Asc.

22.50 Top of spur, 36 ft. above hollow, bears N. 60° W. and S. 60° E.

Here.

25.10 Bottom of hollow, 41 ft. below spur, course N. 60° W.

Asc.

31.00 Top of ridge, 52 ft. above hollow, bears N. 60° W. and S. 60° E.

Here.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 18 in. in the ground; surrounded by a mound of earth and stone, for 1/4 sec. covered on base east 1/4 S 1 in W half and S 6 in E half, from which

a pine tree, 6 in. in dia., bears S. 81° E., 23 lks. dist.

marked 1/4 S 6 B T.

a pine tree, 5 in. in dia., bears N. 10° W., 25 lks. dist.,

marked 1/4 S 1 B T.

55.00 Bottom of hollow, 31 ft. below ridge, course N. 51° W.

Asc.

61.00 Top of ridge, 35 ft. above hollow, bears N. W. and S. E.

Here.

80.00 Bottom of hollow, 60 ft. below ridge, course N. 60° W.

Asc.

85.00 Top of ridge, 46 ft. above hollow bears N. 60° W. and S. 60° E.

Luxury East Boundary T. 31 S. R. 9 E.

Shams

Desc.

93.00 Bottom of hollow, 35 ft. below ridge,
course N. 70° W.

Asc.

110.65 Intersect 6th Standard Parallel South.
17.55 chs E. of St. cor. of sec. 31 & 32 T.
30 S. R. 10 E. heretofore described.

Set an iron post, 3 ft. long, 3 ins.
in dia., 16 ins. in the ground,
surrounded by a mound of earth
and stone for closing cor. of T.

31 S. R. 9 and 10 E. with an brass cap
T. 30 S. R. 10 E. S. 31, S. 32 in N. half
C. R. 10 E. S. 6 in. S. E. and
T. 31 S. R. 9 E. S. 1 in S. W. quadrants

from which

A line of fence, 10 ins. in dia.,
bears S. 35° E., 38 lbs. dist.

with T. 31 S. R. 10 E. S. 6 B. T.

A post 10 ins. in dia.

bears S. 16° W., 32 lbs. dist.

with T. 31 S. R. 9 E. S. 1 B. T.

land, mountainous

soil, sandy loam.

Subsoil, gravel.

Timber, cedar and pine.

Undergrowth, none.

Good grass for grazing.

Mountainous land or lands
covered with timber, 110.65 chs.

August 23, 1911

Timothy Stewart

Instrumentman U.S.A.

Latitudes, Departures and Closing Errors.

Line designated	course	dist.	Latitudes		Departures	
			71. S.	E.	71.	
		chain	chain	chain	chain	chain
1. Ely. of 31 S. R. 9 E.	North	570.97	570.97			
2. Ely. of 31 S. R. 9 E.						
3. Along 6 th St. Parallel	East	476.56		476.56		
4. Ely. of 31 S. R. 9 E.	South	570.65		570.65		
5. Ely. of 31 S. R. 9 E.	West	477.74			477.74	
Convergence		.53			.61	
Totals			570.97	570.65	477.17	477.74
			<u>570.65</u>		<u>477.17</u>	
Error in Latitude			.32			
Error in Departure					.57	

August 23 1911.
 John P Stewart
 Quincy Stewart
 Instrumentmen L. O.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191____, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

~~For final oath of transitman see book "P" T. 32 S., R. 9 E.~~

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18, 1914

The foregoing field notes of the survey of _____ the South and East Boundaries of Township No. 31 South, Range No. 9 East of the Salt Lake Base and Meridian Utah, _____

executed by _____ Quinby Stewart _____ under his special instructions dated _____ March 27, _____, 1914, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

J. C. Thoresen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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BOOK A-396

N.

FIELD NOTES

OF THE SURVEY OF THE

236.

SUBDIVISION

OF

TOWNSHIP 31 SOUTH, RANGE 9 EAST

Of the SALT LAKE BASIN AND Meridian,

In the State of UTAH

EXECUTED BY

John B. Stewart and Quincy Stewart

In the capacity of U.S. ^{Translators} ~~Surveyors~~ under instructions dated March 27, 1911,

issued by the United States Surveyor General to govern surveys included in

Group No. E, which were approved by the Commissioner of the General Land

Office, April 25, 1911, pursuant to authority contained in the Act of

Congress dated , 1911.

Survey commenced August 23, 1911

Survey completed September 7, 1911

BOOK A-396

INDEX DIAGRAM.

Township 31 South, Range 9 East

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SUBDIVISION T. 31 S., R. 9 E.

Chains

Survey commenced Aug. 23, 1911, and executed with a W. and L. E. Gurley explorer's transit No. 957 with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct; and was approved by the Surveyor General for Utah, March 29, 1911.

For complete test of instrument see book "L" of this survey.

At 8h 3m a.m., 1 .m.t., I set off 38°04'N. on the lat. arc; 11°43'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36 on S. bdy. of Tp. heretofore described.

Thence I run N.0°01'W. bet. secs. 35 and 36.

Over rolling mountainous land; through scattering cedar and pinon pine timber and sagebrush.

Ascend.

12.00 Top of ridge, 25 ft. above cor., bears E. and W.

Descend.

13.00 Bottom of hollow, 50 ft. below ridge, course S.80°W.

Ascend.

19.50 Top of spur, 25 ft. above hollow, bears E. and W.

Descend.

24.00 Bottom of hollow, 25 ft. below spur, course S.75°W.

Ascend.

33.00 Top of ridge, 25 ft. above hollow, bears E. and W.

Descend.

36.00 Bottom of hollow, 50 ft. below ridge, course S.80°W.

Ascend.

40.00 Set an iron post 3 ft. long, 1 in. in dia.; 26 ins. in the ground for 1/4 sec. cor., mkd. on brass cap 1/4 S 35 in W. half and S 36 in E. half; from which

SUBDIVISION T. 31 S., R. 9 E.

Chains

A cedar, 8 ins. dia., bears S. 52° E., 79
 lks. dist., mkd. $\frac{1}{4}$ S 36 B T

A cedar, 7 ins. dia., bears S. 49° W., 139
 lks. dist., mkd. $\frac{1}{4}$ S 35 B T

42.00 Top of ridge, 150 ft. above hollow, bears E. and W.
 Descend.

50.00 Bottom of hollow, 150 ft. below ridge, course W.
 Ascend.

60.00 Top of ridge, 100 ft. above hollow, bears E. and W.
 Descend.

74.00 Bottom of hollow, 100 ft. below ridge, course N. 60° W.
 Ascend.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in
 the ground for cor. of secs. 25, 26, 35 and 36 mkd. on
 brass cap

T 31 S S 26 in NW.
 R 9 E S 25 in NE.
 S 36 in SE. and
 S 35 in SW. quadrants; from which

A pinon pine, 8 ins. dia., bears N. 40° E., 66
 lks. dist., mkd. T 31 S R 9 E S 25 B T

A cedar, 8 ins. dia., bears S. 48° E., 23
 lks. dist., mkd. T 31 S R 9 E S 36 B T

A cedar, 9 ins. dia., bears S. 76° W., 29
 lks. dist., mkd. T 31 S R 9 E S 35 B T

A cedar, 10 ins. dia., bears N. 19° W., 49
 lks. dist., mkd. T 31 S R 9 E S 26 B T

Land, mountainous, sloping and draining westerly.
 Soil, sand and clay; subsoil, clay and gravel.
 Timber, cedar and pinon pine.
 Undergrowth, sage.
 A little grass.

Mountainous land, or land covered with timber or brush
 80.00 chs.

August 23, 1911: At this cor. I set off 11° 39' N. on

SUBDIVISION T. 31 S., R. 9 E.

Chains

the decl. arc; and at Oh 3m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°05'N., which is the proper lat. nearly.

East on a random line bet. secs. 25 and 36 ,

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.94 Intersect E. bdy. of Tp. 5 lks. N. of the cor. of secs.

25, 30, 31 and 36, heretofore described. Thence I run N.89°58'W. on a true line bet. secs. 25 and 36.

Over mountainous land; through heavy cedar and pinon pine timber.

Ascend.

39.97 Set an iron post 3 ft. long, 1 in. dia., 20 ins. in the ground, to solid rock, surrounded by a mound of earth and stone for $\frac{1}{2}$ sec. cor., marked on brass cap $\frac{1}{4}$ S 25 in N. half, and S 36 in S. half; from which

A pinon pine, 8 ins. dia., bears N.65°E., 29 lks. dist., mkd. $\frac{1}{4}$ S 25 B T

A cedar, 10 ins. dia., bears S.40°E., 54 lks. dist., mkd. $\frac{1}{4}$ S 36 B T

41.75 Top of ridge, 100 ft. above sec. cor., bears N.75°E. and S.75°W.

Descend.

79.94 The cor. of secs. 25, 26, 35 and 36.

Land, mountainous.

Soil, sand and clay.

Subsoil, clay and gravel.

Timber, cedar and pinon pine.

No undergrowth. A little grass.

Mountainous land, or land covered with heavy timber

79.94 chs.

N.0°01'W. bet. secs. 25 and 26.

Over rough mountainous land; through cedar and pinon

SUBDIVISION T. 31 S., R. 9 E.

Chains

pine, timber, and sagebrush.

Asc.

31.00 Top of ridge, 75 ft. above cor., bears E. and W.
Descend.

33.50 Bottom of hollow, 75 ft. below ridge, course W.
Asc.

38.75 Top of ridge, 80 ft. above hollow, bears E. and W.
Descend.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 26 in
W. half, and S 25 in E. half; from which

A pinon pine, 7 ins. dia., bears S.80°E., 31
lks. dist., mkd. $\frac{1}{4}$ S 25 B T

A pinon pine, 6 ins. dia., bears S.60°W., 24
lks. dist., mkd. $\frac{1}{4}$ S 26 B T

44.00 Bottom of hollow, 100 ft. below ridge, course N.60°W.
Asc.

54.00 Top of ridge, 100 ft. above hollow, bears N.60°W.
and S.60°E.

Descend.

56.00 Bottom of hollow, 50 ft. below ridge, course N.60°W.
Ascend.

65.00 Top of ridge, 108 ft. above hollow, bears N.75°W. and
S.75°E. Descend.

72.00 Bottom of hollow, 50 ft. below ridge, course N.75°W.
Ascend.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 18 ins. in
the ground, surrounded by a mound of earth and stone,
for cor. of secs. 23, 24, 25 and 26, mkd. on brass cap

T 31 S S 23 in NW.

R 9 E S 24 in NE.

S 25 in SE.; and

S 26 in SW. quadrants; from which

A pinon pine, 16 ins. dia., bears N.25°E., 80
lks. dist., mkd. T 31 S R 9 E S 24 B T

A cedar, 10 ins. dia., bears S.32°E., 29

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

100.00 lks. dist., mkd. T 31 S. R. 9 E S 25 B T

A pinon pine, 10 ins. dia., bears S. 11° W., 94

100.00 lks. dist., mkd. T 31 S R 9 E S 26 B T

A pinon pine, 12 ins. dia., bears N. 22° W., 70

100.00 lks. dist., mkd. T 31 S. R. 9. E. S 23 B T

Land, mountainous; sloping and draining westerly.

Soil, white sand and gravel; subsoil, gravel and white sandstone formation.

Timber, cedar and pinon pine. Undergrowth, sage.

A little grass.

Mountainous land, or land covered with timber or brush

80.00 chs. Aug. 23, 1911.

Aug. 24, 1911: At 8h 3m a.m., l.m.t., I set off 38° 06' N. on the lat. arc; 11° 23' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26.

Thence I run

S. 89° 58' E. on a random line, bet. secs. 24 and 25.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.90 Intersect E. bdy. of Tp. 5 lks. N. of cor. of secs. 19, 24, 25 and 30, heretofore described.

Thence I run

N. 89° 56' W. on a true line bet. secs. 24 and 25,

Over rough mountainous land; through cedar and pinon pine timber.

39.95 Set an iron post 3 ft. long, 1 in. in dia., 19 ins. in the ground, to solid rock, surrounded by mound of earth and stone for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 24 in N. half, and S 25 in S. half; from which

A cedar, 8 ins. dia., bears N. 45° E., 7

100.00 lks. dist., mkd. $\frac{1}{4}$ S 24 B T

A pinon pine, 10 ins. dia., bears S. 40° E., 26

100.00 lks. dist., mkd. $\frac{1}{4}$ S 25 B T

SUBDIVISION T. 31 S., R. 9 E.

Chains	
45.00	Bottom of hollow, 250 ft. below sec. cor., course N. and S. Ascend.
61.00	Top of ridge, 25 ft. above hollow, bears N.30°W. and S.30°E. Descend.
79.90	The cor. of secs. 23, 24, 25, and 26. Land, mountainous. Soil, sand and clay. Subsoil, clay and gravel. Timber, cedar and pinon pine. Undergrowth, sage. A little grass. Mountainous land, or land covered with timber 79.90 chs. Aug. 24, 1911: At Oh 3m p.m., l.m.t., I set off 11°19'N. on the decl. arc; and observe the sun on the meridian; the resulting lat. is 38°06'N., which is the proper lat. nearly.
	N.0°01'W. bet. secs. 23 and 24. Over rough mountainous land; through cedar and pinon pine timber. Ascend.
12.00	Top of ridge, 50 ft. above cor., bears E. and W. Desc.
8.00	Bottom of hollow, 50 ft. below ridge, course W. Ascend.
10.00	Top of ridge, 300 ft. above hollow, bears E. and W. Descend.
27.75	Cross Dugout Creek, 5 lks. wide, 2 ins. deep, 210 ft. below ridge, course S.75°W. Ascend.
38.75	Top of ridge, 151 ft. above creek, bears N.75°E. and S.75°W. Descend.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., mkd. on brass cap 1/4 S 23 in W. half, and S, 24 in E. half; from which A pinon pine, 7 ins. dia., bears S.65°E., 67 lks. dist., mkd. 1/4 S 24 B T A cedar, 8 ins. dia., bears N.50°W., 54 lks. dist., mkd. 1/4 S 23 B T

Subdivision T. 31 S., R. 9 E.

Chains

40.50 Bottom of hollow, 75 ft. below ridge, course W.
Ascend.

74.25 Top of ridge, 75 ft. above hollow, bears N.60°W. and S.
60°E.

Descend.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 18 ins. in
the ground, to solid rock, surrounded by a mound of
earth and stone for cor. of secs. 13, 14, 23 and 24,

mkd. on brass cap

T 31 S S 14 in NW

R 9 E S 13 in NE

S 24 in SE.; and

S 23 in SW quadrants; from which

A cedar, 6 ins. dia., bears N.14°E., 31 lks.

dist., mkd. T 31 S R 9 E S 13 B T

A pinon pine, 7 ins. dia., bears S.5°E., 88 lks.

dist., mkd. T 31 S R 9 E S 24 B T

A pinon pine, 6 ins. dia., bears S.52°W., 58 lks.

dist., mkd. T 31 S R 9 E S 23 B T

A pinon pine, 5 ins. dia., bears N.43°W., 46 lks.

dist., mkd. T 31 S R 9 E S 14 B T

Land, mountainous, sloping and draining westerly.

Soil, sand and black loam.

Subsoil, gravel and sandstone formation.

Timber, cedar and pinon pine.

Undergrowth, sage. A little grass.

Mountainous land, or land covered with timber or brush
80.00 chs.

S.89°56'E. on a random line bet. secs. 13 and 24.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.92 Intersect E. bdy. of Tp. 5 lks. S. of cor. of secs. 13,
18, 19 and 24, heretofore described. Thence I run

N.89°58'W. on a true line bet. secs. 13 and 24.

Over rough mountainous land; through cedar and pinon.

Subdivision of T. 31 S., R. 9 E.

Chains

- pine timber. Ascend.
- 15.00 Top of ridge, 40 ft. above cor., bears NE. and SW.
Descend.
- 37.00 Bottom of hollow, 150 ft. below ridge, course S.50°W.
Ascend.
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 13
in N. half, and S 24 in S. half; from which
A pinon pine, 8 ins. dia., bears N.5°E., 30
lks. dist., mkd. $\frac{1}{4}$ S 13 B T
A cedar, 5 ins. dia., bears S.15°E., 15
lks. dist., mkd. $\frac{1}{4}$ S 24 B T
- 70.00 Bottom of hollow, 25 ft. below same hollow, crossed at
37.00 chs., course N.60°W.
Ascend.
- 79.92 The cor. of secs. 13, 14, 23 and 24.
Land, mountainous, sloping and draining westerly.
Soil, sand and black loam.
Subsoil, clay and gravel.
Timber, cedar and pinon pine.
Undergrowth, sage. A little grass.
Mountainous land or land covered with timber or brush,
79.92 chs.

Aug. 24, 1911.

Aug. 25, 1911: At 8h 2m a.m., l.m.t., I set off 38°07'N.
on the lat. arc; 11°02'N. on the decl. arc; and deter-
mine a meridian with the solar at the cor. of secs. 13,
14, 23 and 24. Thence I run

N.0°01'W. bet. secs. 13 and 14.

Over high rolling mountainous land; through cedar and
pinon pine timber. Descend.

3.00 Bottom of hollow, 60 ft. below cor., course N.55°W.

Ascend.

30.00 Top of ridge, 75 ft. above hollow, bears N.60°W. and
S.60°E. Desc.

Chains

- 39.00 Bottom of hollow, 80 ft. below ridge, course N.60°W.
Ascend.
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 13 in
E. half, and S 14 in W. half; from which
A pinon pine, 8 ins.dia., bears S.48°E., 11
lks. dist., mkd. $\frac{1}{4}$ S 13 B T
A pinon pine, 4 ins.dia., bears S.67°W., 46
lks. dist., mkd. $\frac{1}{4}$ S 14 B T
- 51.00 Top of ridge, 70 ft. above hollow, bears E. and W.
Descend.
- 54.00 Bottom of hollow, 30 ft. below ridge, course N.70°W.
Ascend.
- 57.00 Top of ridge, 40 ft. above hollow, bears N.80°W. and S.
80°E.
Descend.
- ~~60.00 Bottom of hollow, 60 ft. below ridge, course W.
Ascend.~~
- 74.50 Top of ridge, 200 ft. above hollow, bears N.70°E. and
S.70°W.
Descend.
- 77.00 Bottom of hollow, 200 ft. below ridge, course N.80°W.
Ascend.
- 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 14 ins. in
the ground, to solid rock, surrounded by a mound of
earth and stone for cor. of secs. 11, 12, 13 and 14
mkd. on brass cap
T 31 S S 11 in NW
R 9 E S 12 in NE
S 13 in SE.; and
S 14 in SW. quadrants; from which
A pinon pine, 4 ins.dia., bears N.19°E., 108
lks. dist., mkd. T 31 S R 9 E S 12 B T
A pinon pine, 5 ins.dia., bears S.25°E., 108
lks. dist., mkd. T 31 S R 9 E S 13 B T

Subdivision of T. 31 S., R. 9 E.

Chains

A pinon pine, 6 ins.dia., bears S.63°W., 30
lks. dist., mkd. T 31 S R 9 E S 14 B T

A cedar, 12 ins.dia., bears N.80°W., 3
lks. dist., mkd. T 31 S R 9 E S 11 B T

Land, high, mountainous, sloping and draining westerly.
Soil, sand.

Subsoil, gravel and white sandstone formation.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land or land covered with timber or brush,
80.00 chs.

Aug. 25, 1911: At this cor. I set off 10°58'N. on the
decl. arc; and at Oh 02m p.m., l.m.t., observe the sun
on the meridian; the resulting lat. is 38°08'N., which
is the proper lat. nearly.

S.89°58'E. on a random line bet. secs. 12 and 13.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.96 Intersect E. bdy. of Tp. 3 lks. S. of cor. of secs. 7,
12, 13 and 18, heretofore described. Thence I run
S.89°59'W. on a true line bet. secs. 12 and 13.

Over high mountainous land; through cedar and pinon
pine timber. Ascend.

1.00 Top of ridge, 40 ft. above cor., bears N.30°W. and S.30°
E. Descend.

33.50 Bottom of swale, 370 ft. below ridge, course S. Ascend.

35.00 Top of ridge, 30 ft. above swale, bears N. and S. Descend.

39.98 Set an iron post 3 ft. long, 1 in. in dia., 18 ins. in
the ground, surrounded by a mound of earth and stone,
for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 12 in N. half,
and S 13 in S. half; from which

A cedar, 8 ins.dia., bears N.25°E., 72
lks. dist., mkd. $\frac{1}{4}$ S 12 B T

A pinon pine, 12 ins.dia., bears S. 28

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 Subdivision of T. 31 S., R. 9 E.

Chains

- ... lks. dist., mkd. $\frac{1}{4}$ S. 13 B T
- 46.00 Bottom of swale, 350. ft. below ridge, course N.70°W.
 Ascend.
- 69.00 Top of ridge, 40 ft. above swale, bears N.50°W. and S.
 50°E.
 Descend.
- 79.96 The cor. of secs. 11, 12, 13 and 14.
 Land, mountainous.
 Soil, sand and clay.
 Subsoil, clay and gravel.
 Timber, cedar and pinon pine.
 Undergrowth, sage. No grass.
 Mountainous land, or land covered with timber or brush
 79.96 chs.
-
- N.0°01'W. bet. secs. 11 and 12.
 Over rolling mountainous land; through cedar and pinon
 pine timber; descend.
- 28.50 Bottom of swale, 30 ft. below cor., course N.30°W.
 Ascend.
- 34.00 Top of ridge, 60 ft. above swale, bears N.70°E. and
 S.70°W.
 Descend.
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 19 ins. in
 the ground, to solid rock, and surrounded by a mound
 of earth and stone for $\frac{1}{4}$ sec. cor., mkd. on brass cap
 $\frac{1}{4}$ S 11 in W. half, and S 12 in E. half; from which
 A pinon pine, 10 ins. dia., bears N.78°E., 28
 lks. dist., mkd. $\frac{1}{4}$ S 12 B T
 A cedar, 8 ins. dia., bears S.70°W., 30
 lks. dist., mkd. $\frac{1}{4}$ S 11 B T
- 66.00 Bottom of hollow, 100 ft. below ridge, course N.60°W:
 Ascend.
- 76.00 Knoll on ridge, 100 ft. above hollow, bears N.80°W. and
 S.80°E.
 Descend.

Subdivision of T. 31 S., R. 9 E.

Chains

80.00

Set an iron post 3 ft. long, 2 ins. in dia., 20 ins. in the ground, to solid rock, and surrounded by a mound of earth and stone for cor. of secs. 1, 2, 11 and 12, mkd. on brass cap.

T 31 S S 2 in NW.

R 9 E S 1 in NE.

S 12 in SE.; and

S 11 in SW. quadrant; from which

A pinon pine, 10 ins. dia., bears N. 75° E., 40 lks. dist., mkd. T 31 S R 9 E S 1 B T

A pinon pine, 12 ins. dia., bears S. 50° E., 35 lks. dist., mkd. T 31 S R 9 E S 12 B T

A pinon pine, 12 ins. dia., bears S. 60° W., 75 lks. dist., mkd. T 31 S R 9 E S 11 B T

A pinon pine, 14 ins. dia., bears N. 75° W., 50 lks. dist., mkd. T 31 S R 9 E S 2 B T

Land, mountainous, sloping and draining westerly.

Soil, sand and clay.

Subsoil, white clay and gravel.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land, or land covered with timber or brush

80.00 chs.

Aug. 25, 1911.

Aug. 26, 1911: At 8h 2m a.m., l.m.t., I set off 38° 09' N. on the lat. arc; 10° 41' N, on the decl. arc; and determine a meridian with the solar at the cor. of secs.

1, 2, 11 and 12. Thence I run

N. 89° 59' E. on a random line bet. secs. 1 and 12,

40.00

Set temp. 1/4 sec. cor.

80.02

Intersect E. bdy. of Tp. 7 lks. N. of cor. of secs. 1, 6, 7 and 12, heretofore described,

Thence I run

Subdivision of T. 31 S., R. 9 E.

Chains

- N.89°58'W. on a true line bet. secs. 1 and 12.
 Over high mountainous land; through heavy cedar and
 pinon pine timber.
 Descend.
- 10.00 Bottom of swale, 20 ft. below cor., course N.40°W.
 Ascend.
- 15.00 Top of ridge, 40 ft. above swale, bears N.60°W. and S.
 60°E. Descend.
- 23.00 Bottom of hollow, 150 ft. below ridge, course N.30°W.
 Ascend.
- 26.00 Top of ridge, 120 ft. above hollow, bears N.30°W. and
 S.30°E. Descend.
- 40.01 Set an iron post 3 ft. long, 1 in. in dia., 17 ins. in
 the ground, to solid rock, and surrounded by a mound
 of earth and stone for $\frac{1}{4}$ sec. cor., mkd. on brass cap
 $\frac{1}{4}$ S 1 in N. half, and S 12 in S. half; from which
 A pinon pine, 7 ins.dia., bears N.60°W., 40
 lks. dist., mkd. $\frac{1}{4}$ S 1 B T
 A pinon pine, 9 ins.dia., bears S.72°E., 23
 lks. dist., mkd. $\frac{1}{4}$ S 12 B T
- 45.00 Bottom of hollow, 100 ft. below ridge, course N.35°W.
 Ascend.
- 51.00 Top of ridge, 50 ft. above hollow, bears N.60°W. and S.
 60°E. Descend.
- 58.00 Bottom of hollow, 60 ft. below ridge, course N.60°W.
 Ascend.
- 61.00 Top of spur, 30 ft. above hollow, bears N.50°W. and S.
 50°E. Descend.
- 66.00 Bottom of hollow, 40 ft. below spur, course N.30°W.
 Ascend.
- 75.00 Top of ridge, 60 ft. above hollow, bears NW. and SE.
 Descend.
- 77.50 Bottom of hollow, 40 ft. below ridge, course N.60°W.
 Ascend.
- 80.02 The cor. of secs. 1, 2, 11 and 12.
 Land, mountainous, sloping and draining northwesterly.

Chains

Soil, sand and black loam.
 Subsoil, clay and gravel.
 Timber, cedar and pinon pine.
 Undergrowth, sage.
 Good grass for grazing.
 Mountainous land or land covered with timber or brush

80.02 chs.

Aug. 26, 1911: At this cor. I set off $10^{\circ}37'N$. on the decl. arc; and at 0h 2m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is $38^{\circ}09'N$, which is the proper lat. nearly.

$N.0^{\circ}01'W$. bet. secs. 1 and 2, on a true line.

Over rolling mountainous land; through cedar and pinon pine timber. Descend.

2.00 Bottom of hollow, 20 ft. below cor., course $N.50^{\circ}W$. Ascend.

5.00 Top of ridge, 70 ft. above hollow, bears $N.50^{\circ}W$. and $S.50^{\circ}E$. Descend.

30.00 Bottom of canon, 100 ft. below ridge, course $N.30^{\circ}W$. Ascend.

35.00 Top of point, 60 ft. above canon, bears $N.30^{\circ}W$. and $S.30^{\circ}E$. Descend.

38.70 Bottom of swale, 50 ft. below point, course $N.30^{\circ}W$. Ascend.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 2 in W. half, and S 1 in E. half; from which

A pinon pine, 6 ins. in dia., bears $S.60^{\circ}E$, 18 lks. dist., mkd. $\frac{1}{4}$ S 1 B T

A pinon pine, 8 ins. dia., bears $S.65^{\circ}W$, 30 lks. dist., mkd. $\frac{1}{4}$ S 2 B T

52.00 Top of point, 40 ft. above swale, bears $N.30^{\circ}W$. and $S.30^{\circ}E$. Descend.

60.00 Bottom of hollow, 60 ft. below point, course $N.30^{\circ}W$.

SUBDIVISION T. 31 S., R. 9 E.

Chains

Ascend.

110.64

Intersect Sixth Standard Parallel South, 17.54 chs. E. of standard cor. of T. 30 S., Rs. 9 and 10 E. heretofore described.

Set an iron post 3 ft. long, 2 ins. in dia., 16 ins. in the ground, to solid rock, and surrounded by a mound of earth and stone for closing cor. of secs. 1 and 2 mkd. on brass cap

T 30 S R 10 E in N half,

C R 9 E S 1 in SE., and

C T 31 S S 2 in SW. quadrants; from which

A pinon pine, 8 ins. dia., bears S. 30° E., 42 lks. dist., mkd. T 31 S R 9 E S 1 B T

A cedar, 12 ins. dia., bears S. 45° W., 30 lks. dist., mkd. T 31 S R 9 E S 2 B T

Land, mountainous, sloping and draining northwesterly.

Soil, sandy loam. Subsoil, gravel.

Timber, cedar and pinon pine.

Undergrowth, sage. A little grass.

Mountainous land or land covered with timber or brush
110.64 chs.

Aug. 26, 1911.

John R. Stewart
Instrumentman G. L. O.

Survey commenced Aug. 24, 1911; and executed with a Keuffel and Esser mountain transit No. 20578 with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the Surveyor General for Utah, March 20, 1911.

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

For complete test of instrument see book "M" of this survey.

Aug. 24, 1911: At 8h 3m a.m., l.m.t., I set off 38°04'N. on the lat. arc; 11°23'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35 on S. bdy. of Tp. heretofore described.

Thence I run

N.0°01'W. bet. secs. 34 and 35.

Over bench land; through cedar and pinon pine timber and sagebrush.

7.35 Wash, 10 lks. wide, 8 ft. deep, course N.35°W.

28.00 Descend abruptly, bearing NW. and SE.

29.00 Bottom of South Creek, 2 lks. wide, 4 ins. deep, 100 ft. below cor., course NW.

30.50 Ascent, bears N.55°W. and S.55°E.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 34 in W. half, and S 35 in E. half; from which

A pinon pine, 14 ins. dia., bears N.60°E., 85 lks. dist., mkd. $\frac{1}{4}$ S 35 B T

A pinon pine, 12 ins. dia., bears N.20°W., 45 lks. dist., mkd. $\frac{1}{4}$ S 34 B T

40.05 Top of ridge, 120 ft. above creek, bears N.50°W. and S. 50°E. Ascend.

50.00 Bottom of hollow, 100 ft. below ridge, course N.20°W. Ascend.

66.00 Bottom of hollow, course N.60°W. Ascend.

72.00 Top of ridge, 80 ft. above hollow, bears N.35°W. and S. 35°E. Descend.

79.00 Hollow, course S.60°E. Ascend.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 26, 27, 34 and 35 mkd. on brass cap

T 31 S S 27 in NW.

Subdivision T. 31 S., R. 9 E.

Chains

unlabeled

33.00 ... R 9 E S. 26 in NE.

35.00 ... S 35 in SE.; and

37.00 ... S 34 in SW quadrants; from which

A pinon pine, 4 ins. dia., bears N. 75° E., 12

lks. dist., mkd. T 31 S R 9 E S 26 B T

A pinon pine, 5 ins. dia., bears S. 8° E., 17

lks. dist., mkd. T 31 S R 9 E S 35 B T

A pinon pine, 6 ins. dia., bears S. 65° W., 15

lks. dist., mkd. T 31 S R 9 E S 34 B T

A cedar, 5 ins. dia., bears N. 30° W., 16

lks. dist., mkd. T 31 S R 9 E S 27 B T

Land, mountainous.

Soil, sand and clay.

Subsoil, gravel and white clay.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous or bench land, or land covered with timber or brush 80.00 chs.

Aug. 24, 1911: At this cor. I set off 11° 19' N. on the decl. arc; and at Oh 3m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38° 05' N., which is the proper lat. nearly.

Start here 10'

East, on a random line bet. secs. 26 and 35.

40.00 Set temp. 1/4 sec. cor.

80.08 Intersect N. and S. line, 12 lks. N. of cor. of secs. 25, 26, 35 and 36. Thence I run

N. 89° 55' W. on a true line bet. secs. 26 and 35.

Over mountainous land; through heavy cedar and pinon pine timber and dense sagebrush. Descend.

16.75 Bottom of swale, 40 ft. below cor., course S. 60° W.

38.75 Bottom of hollow, 25 ft. below swale; course N. 60° W.

Ascend. ...

40.04 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in

.Subdivision T..51 S., R. 9 E.

Chains

the ground for 1/4 sec. cor. mkd. on brass cap 1/4 S 26 in N. half, and S 35 in S. half; from which

A pinon pine, 6 ins. dia., bears N. 88° 30' W., 12 lks. dist.; mkd. 1/4 S 26 B T

A cedar, 12 ins. dia., bears S. 14° W., 60 lks. dist.; mkd. 1/4 S 35 B T

42.00 Top of point, 60 ft. above hollow, bears NW. and SE. Descend.

80.08 The cor. of secs. 26, 27, 34 and 35. Land, mountainous. Soil, sand and clay. Subsoil, clay and gravel. Timber, cedar and pinon pine. Undergrowth, sage. Good grass for grazing. Mountainous land, or land covered with timber or brush 80.08 chs.

N. 0° 01' W. bet. secs. 26 and 27.

Over mountainous land; through heavy cedar and pinon pine timber and dense sagebrush. Descend.

2.00 Bottom of swale, 10 ft. below cor., course S. 70° W. Ascend.

5.00 Top of ridge, 40 ft. above swale, bears N. 80° W. and N. 80° E. Descend.

24.00 Bottom of hollow, 60 ft. below ridge, course W. Ascend.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor. mkd. on brass cap 1/4 S 27 in W. half and S 26 in E. half; from which

A pinon pine, 5 ins. dia., bears S. 40° E., 32 lks. dist., mkd. 1/4 S 26 B T

A pinon pine, 8 ins. dia., bears S. 60° W., 28 lks. dist., mkd. 1/4 S 27 B T

47.00 Top of ridge, 120 ft. above hollow, bears N. 80° E. and S. 80° W.

Subdivision T. 31 S., R. 9 E.

Chains

Descend.

75.50 Foot of descent, 160 ft. below ridge, bearing E. and S.50°W.

77.10 Dugout Creek, 3 lks. wide, 7 ins. deep, course S.50°W.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 22, 23, 26 and 27, mkd. on brass cap

T 31 S S 22 in NW.

R 9 E S 23 in NE.

S 26 in SE. and

S 27 in SW. quadrants; from which

A cedar, 8 ins. dia., bears N.46°E., 10

lks. dist., mkd. T 31 S R 9 E S 23 B T

A pinon pine, 7 ins. dia., bears S.45°E., 80

lks. dist., mkd. T 31 S R 9 E S 26 B T

A cedar, 6 ins. dia., bears S.71°W., 12

lks. dist., mkd. T 31 S R 9 E S 27 B T

A pinon pine, 8 ins. dia., bears N.24°W., 12

lks. dist., mkd. T 31 S R 9 E S 22 B T

Land, mountainous.

Soil, sand and clay.

Subsoil, clay and gravel.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land, or land covered with timber or brush

80.00 chs.

August 24, 1911.

August 25: At 8h 2m a.m., l.m.t., I set off 38°06'N. on the lat. arc; 11°02'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22, 23, 26 and 27.

Thence I run

S.89°55'E. on a random line bet. secs. 23 and 26.

Subdivision of T. 31 S., R. 9 E.

Chains

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 80.10 Intersect N. and S. line 5 lks. S. of cor. of secs. 23, 24, 25 and 26.
Thence I run
N. $89^{\circ}57'W.$ on a true line bet. secs. 23 and 26.
Over mountainous land; through heavy cedar and pinon pine timber and sagebrush.
- Desc.
- 27.00 Bottom of swale, 160 ft. below cor., course $S.75^{\circ}W.$
Ascend to low point,
- 40.05 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 23 in N. half and S 26 in S. half; from which
A cedar, 10 ins. dia., bears $S.45^{\circ}E.$, 65 lks. dist., mkd. $\frac{1}{4}$ S 26 B T
A cedar, 4 ins. dia., bears $N.15^{\circ}W.$, 53 lks. dist., mkd. $\frac{1}{4}$ S 23 B T
- 48.00 Descend; bears $N.60^{\circ}W.$ and $S.60^{\circ}E.$
- 50.00 Bottom of Dugout Creek, stream 5 lks. wide, 3 ins. deep, rocky bottom, good water, course $S.70^{\circ}W.$
- 73.00 Same creek as at 50.00 chs.; course $N.70^{\circ}W.$, 5 lks. wide.
- 76.00 Same creek, 5 lks. wide, course SW.
- 80.10 The cor. of secs. 22, 23, 26 and 27.
Land, mountainous.
Soil, sandy loam.
Subsoil, clay and gravel.
Timber, cedar and pinon pine.
Undergrowth, sage.
Good grass for grazing.

Mountainous, land, or land covered with timber and brush
80.10 chs.

Aug. 25, 1911: At this cor. I set off $10^{\circ}58'N.$ on the decl. arc; and at Oh 2m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is $38^{\circ}06'N.$ which is the proper lat. nearly.

Subdivision T. 31 S., R. 9 E.

Chains

N.0°01'W. bet. secs. 22 and 23, over

Over mountainous land; through scattering cedar timber and dense sagebrush.

3.00 Ascent, bears E. and W. Leave canon bottom.

20.00 Top of ridge, 210 ft. above canon, bears N.70°W. and S. 70°E.

Descend.

23.10 Wash, 10 lks. wide, 2 ft. deep, course N.70°W.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 23 in W. half and S 23 in E. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

50.50 Wash, 10 lks. wide, 2 ft. deep, course NW.

78.00 Descend abruptly, bearing NW. and SE.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 26 ins. in the ground for cor. of secs. 14, 15, 22 and 23, mkd. on brass cap

T 31 S S 15 in NW.
R 9 E S 14 in NE.

S 23 in SE. and
S 22 in SW. quadrants; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Land, mountainous.

Soil, sandy loam. Subsoil, gravel and clay.

Timber, cedar.

Undergrowth, sage. Good grass.

Mountainous land or land covered with timber or brush

80.00 chs.

S.89°57'E. on a random line bet. secs. 14 and 23,

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.14 Intersect N. and S. line at the cor. of secs. 13, 14, 23 and 24. Thence I run

N.89°57'W. on a true line bet. secs. 14 and 23.

Over mountainous land; through scattering cedar and pin-

Subdivision T. 31 S., R. 9 E.

Chains

on pine timber and dense sagebrush.

Ascend gradually.

32.50 Wash, 20 lks. wide, 6 ft. deep, course N.10°W.

37.00 Top of ridge, 100 ft. above sec. cor., bears N.10°W. and S.10°E.

40.07 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/2 sec. cor., mkd. on brass cap 1/4 S 14 in N. half, and S 23 in S. half; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high N. of cor.

78.10 Bottom of hollow, 250 ft. below ridge, course NW. Ascend.

80.14 The cor. of secs. 14, 15, 22 and 23, Land, mountainous.

Soil, sandy loam. Subsoil, gravel and clay.

Timber, cedar. Undergrowth, sage.

Mountainous land, or land covered with timber or brush

80.14 chs.

August 25, 1911.

Aug. 26: At 8h 2m a.m., l.m.t., I set off 38°07'N. on the lat. arc; 10°41'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23. Thence I run

N.0°01'W. bet. secs. 14 and 15,

Over mountainous land; through scattering cedar timber and sagebrush. Descend.

3.50 Bottom of hollow, 20 ft. below cor., course NW.

Ascend.

19.50 Top of spur, 80 ft. above hollow, bears E. and W.

Descend.

21.50 Bottom of swale, 60 ft. below spur, course S.80°W.

Ascend.

31.00 Top of ridge, 100 ft. above swale, bears N.80°E. and W.

Descend.

39.50 Bottom of swale, 80 ft. below ridge, course S.75°W.

Subdivision T. 31 S., R. 9 E.

Chains

Ascend.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., marked on brass cap 1/4 S 15 in W. half, and S 14 in E. half; and raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor.

45.00 Top of ridge, 120 ft. above swale, bears E. and W. Descend.

50.00 Bottom of swale, 100 ft. below ridge, course W. Ascend.

55.10 Top of ridge, 180 ft. above swale, bears N. 60° W. and S. 60° E. Descend.

62.50 Bottom of hollow, 170 ft. below ridge; course N. 70° W. Ascend.

80.00 Set an iron post 3 ft. long; 2 ins. in dia., 24 ins. in the ground for cor. of secs. 10, 11, 14 and 15, mkd. on brass cap

T 31 S S 10 in NW:

R 9 E S 11 in NE.

S 14 in SE; and

S 15 in SW quadrants; and raise a mound

of stone 2 ft. base, 1 1/2 ft. high W. of cor.

Land, mountainous.

Soil, sand and clay. Subsoil, clay and gravel.

Timber, cedar and piñon pine. Undergrowth sage.

Good grass for grazing.

Mountainous land, or land covered with timber or brush

80.00 chs.

Aug. 26, 1911: At this cor: I set off 10° 37' N. on the decl; arc; and at Oh 2m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38° 08' N., which is the proper lat. nearly.

S. 89° 57' E. on a random line bet. secs. 11 and 14.

40.00 Set temp. 1/4 sec. cor.

Subdivision T. 31 S., R. 9 E.

Chains

- 80.12 Intersect N. and S. line 7 lks. S. of cor. of secs. 11, 12, 13 and 14. Thence I run West on a true line bet. secs. 11 and 14. Over rough mountainous land; through heavy cedar and pinon pine timber and sagebrush. Descend.
- 17.00 Bottom of hollow, 320 ft. below cor., course N.20°W. Ascend.
- 24.00 Top of ridge, 100 ft. above swale, bears NW. and SE. Descend.
- 40.06 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 11 in N. half, and S 14 in S. half, from which
 - A pinon pine, 6 ins. dia., bears N.36°E., 60 lks. dist., mkd. $\frac{1}{4}$ S 11 B T
 - A pinon pine, 14 ins. dia., bears S.14°W., 44 lks. dist., mkd. $\frac{1}{4}$ S 14 B T
- 47.00 Bottom of hollow, 220 ft. below ridge, course N.60°W. Ascend.
- 52.50 Top of spur, 140 ft. above hollow, bears N.60°W. and S.60°E.
- 55.00 Bottom of canon, 200 ft. below spur, course N.50°W. Ascend.
- 56.00 Leave timber, bears NW. and SE.
- 70.10 Top of ridge, 200 ft. above canon, bears N.30°W. and S.30°E. Descend.
- 74.00 Bottom of swale, 60 ft. below ridge, course N.35°W. Ascend.
- 76.00 Top of ridge, 60 ft. above swale, bears N.35°W. and S.35°E. Descend.
- 80.12 The cor. of secs. 10, 11, 14 and 15. Land, mountainous.

Soil, sandy loam. Subsoil, clay.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

Mountainous land or land covered with timber and brush
80.12 chs.

N.0°01'W. bet. secs. 10 and 11.

Over mountainous land; through scattering timber and
sagebrush. Ascend.

5.90 Top of ridge, 40 ft. above cor., bears N.30°W. and S.30°
E. Descend abruptly.

8.50 Bottom of swale, 50 ft. below ridge, course N.35°W.
Ascend.

15.00 Top of ridge 60 ft. above swale, bears NW. and SE.
Descend.

24.00 Bottom of canon, 220 ft. below ridge, course N.60°W.
Ascend.

33.00 Top of ridge, 100 ft. above canon, bears N.60°W. and
S.60°E. Descend.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 10
in W. half, and S 11 in E. half; and raise a mound of
stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

40.80 Bottom of canon, 60 ft. below ridge, course S.60°W.
Ascend.

43.60 Top of ascent; 60 ft. above canon, bears E. and W.
Enter mesa.

80.00 Set an iron post 3 ft. long, 2 ins. in dia.; 24 ins. in
the ground, for cor. of secs. 2, 3, 10 and 11, mkd. on
brass cap

T 31 S S 3 in NW.

R 9 E S 2 in NE.

S 11 in SE. and

S 10 in SW. quadrants; and raise a mound

of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Land, mountainous.

Soil, sandy and clay. Subsoil, clay and gravel.

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

Timber, cedar and pinon pine.

Undergrowth, sage. Good grass for grazing.

Mountainous land, or land covered with timber and brush

80.00 chs.

August 26, 1911.

Quincy Stewart
Instrumentman G.L.O.

August 28, 1911: The sky is overcast, making solar observation impossible.

East, on random line bet. secs. 2 and 11.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

80.10 Intersect the N. and S. line at the cor. of secs. 1, 2, 11 and 12. Thence I run

West, on a true line bet. secs. 2 and 11.

Over mountainous land; through cedar and pinon pine timber and dense sagebrush. Ascend.

7.00 Top of ridge, 60 ft. above cor., bears NW. and SE. Desc.

30.00 Bottom of swale, 150 ft. below ridge, course N.35°W. Ascend.

35.00 Top of ridge, 100 ft. above swale, bears NW. and SE. Descend.

40.05 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 2 in N. half, and S 11 in S. half; from which

A pinon pine, 5 ins. dia., bears N.51°W., 60 lks. dist., mkd. $\frac{1}{4}$ S 2 B T

A pinon pine, 6 ins. dia., bears S.68°W., 36 lks. dist., mkd. $\frac{1}{4}$ S 11 B T

40.70 Bottom of wash, 10 lks. wide, 2 ft. deep, course NW.

80.10 The cor. of secs. 2, 3, 10 and 11.

Land, mountainous.

Soil, sandy loam, well mixed with small pebbles.

Subsoil, gravel and clay.

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

Timber, cedar and piñon pine.
 Undergrowth, sage. A little grass.
 Mountainous land, or land covered with timber or brush.
 80.10 chs.
 Aug. 28, 1911. At the noon hour the sky is overcast,
 making solar observations impossible.

N.0°01'W. bet. secs. 2 and 3, on a true line.
 Over mesa land; through scattering cedar and piñon pine
 timber and sagebrush.

- 9.00 Wash, 15 lks. wide, 2 ft. deep, course N.80°W.
- 17.00 Top of ridge, 100 ft. above cor., bears N.60°W. and S.
60°E. Descend.
- 26.00 Bottom of hollow, 140 ft. below ridge, course N.60°W.
Ascend.
- 35.00 Top of ridge, 160 ft. above hollow, bears N.55°W. and
S.55°E. Descend.
- 39.00 Bottom of swale, 150 ft. below ridge, course N.60°W.
Ascend.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., .26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 3
 in W. half, and S 2 in E. half; and raise a mound of
 stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

- 55.20 Top of ridge, 100 ft. above swale, bears NW. and SW.
Descend.
- 75.00 Bottom of hollow, 100 ft. below ridge, course N.80°W.
Ascend.
- 89.00 Top of ridge, 120 ft. above hollow, bears NW. and SE.
Descend gradually.
- 99.35 Descend abruptly, bears N.50°W. and S.50°E.
- 104.10 Bottom of canon, 260 ft. below ridge, course N.60°W.
Ascend.
- 110.68 Intersect Sixth Standard Parallel South, 17.62 chs. E.
of St. cor. of secs. 35 and 36, heretofore described.

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 2 and 3, mkd. on brass cap

T 30 S R 9 E. in N. half,

C R 9 E S 2 in SE. and

C T 31 S S 3 in SW. quadrants; and

raise a mound of stone 2 ft. base, 1 1/2 ft. high S. of cor.

Land, mountainous.

Soil, sandy loam. Subsoil, gravel and clay.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land, covered with timber or brush 110.68 chs.

August 28, 1911.

John Stewart
Instrumentman G.L.O.

Aug. 28, 1911: At 8h 01m a.m., l.m.t., I set off 38°04'N. on the lat. arc; 10°0'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3, 4, 33 and 34, on S. bdy. of Tp. heretofore described. Thence I run

N.0°02'W. bet. secs. 33 and 34.

Over mountainous land; through heavy cedar and pinon-pine timber and sagebrush. Ascend.

39.80 Top of ridge, 200 ft. above cor., bears NW. and SE.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/2 sec. cor., mkd. on brass cap 1/2 S 33 in W. half, and S 34 in E. half; from which

A pinon pine, 6 ins. dia., bears N. 87° E., 56 lks. dist., mkd. 1/2 S 34 B T

A pinon pine, 10 ins. dia., bears N. 45° W., 26 lks. dist., mkd. 1/2 S 33 B T

Subdivision T. 31 S., R. 9 E.

Chains

45.25 Bottom of swale, 75 ft. below ridge, course N.35°W.
Ascend.

79.50 Top of point, 100 ft. above swale, bears NW. and SE.
Descend.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in
the ground for cor. of secs. 27, 28, 33 and 34, mkd.
on brass cap

T 31 S S 28 in NW.
R 9 E S 27 in NE.
S 34 in SE.; and
S 33 in SW. quadrants; from which

A cedar, 10 ins. dia., bears N.36°E., 58 lks.
dist., mkd. T 31 S R 9 E S 27 B T

A cedar, 5 ins. dia., bears S.83°E., 24 lks.
dist., mkd. T 31 S R 9 E S 34 B T

A pinon pine, 6 ins. dia., bears S.13°W., 89 lks.
dist., mkd. T 31 S R 9 E S 33 B T

A cedar, 4 ins. dia., bears N.17°W., 24 lks.
dist., mkd. T 31 S R 9 E S 28 B T

Land, mountainous.
Soil, sandy loam. Subsoil, gravel.
Timber, cedar and pinon pine.
Undergrowth, sage.

Mountainous land, or land covered with timber or brush
. 80.00 chs.

Aug. 28, 1911: At this cor. I set off 9°56'N. on the
decl. arc; and at Oh Ol' p.m., l.m.t., observe the sun
on the meridian; the resulting lat. is 38°05'N., which
is the proper lat. nearly.

East on a random line bet. secs. 27 and 34,

40.00 Set temp. 1/4 sec. cor.

79.98 Intersect N. and S. line. N. lks. S. of cor. of secs. 26,
27, 34 and 35.
Thence I run

Subdivision T. 31 S., R. 9 E.

Chains

- S.89°57'W. on a true line bet. secs. 27 and 34,
Over mountainous land; through cedar and pinon pine
timber.
- 0.60 Bottom of hollow, 6 ft. below cor., course N.60°W.
Ascend.
- 5.00 Top of point 60 ft. above hollow, bears N.30°W. and S.
30°E. Descend.
- 12.00 Bottom of hollow, 65 ft. below point, course N.20°W.
Ascend to flat.
- 39.99 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 27
in N. half, and S. 34 in S. half; and raise a mound of
stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
- 47.90 Bottom of South Creek, 6 lks. wide, 2 ins. deep, course
N.50°W. Ascend.
- 60.20 Wash, 20 lks. wide, 3 ft. deep, course NW.
- 79.98 The cor. of secs. 27, 28, 33 and 34.
Land, mountainous...
Soil, sandy loam...
Subsoil, clay and gravel...
Timber, cedar and pinon pine...
Undergrowth, sage...
Mountainous land, or land covered with timber or brush
to 79.98 chs.

August 28, 1911.

Aug. 29: At 8h 01m a.m., l.m.t., I set off 38°05'N. on
the lat. arc; 9°38'N. on the decl. arc and determine
a meridian with the solar at the cor. of secs. 27, 28,
33 and 34. Thence I run

- N.0°02'W. bet. secs. 27 and 28.
Over mountainous land; through cedar and pinon pine
timber and sagebrush. Descend.
- 12.50 Bottom of South Creek, stream 6 lks. wide, 1 in. deep,
110 ft. below cor., course W.

Subdivision T. 31 S., R. 9 E.

Chains

Ascend.

- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 28° in W. half, and S 27° in E. half; from which
 - A cedar, 8 ins. dia., bears S 45° E., 35 lks. dist., mkd. $\frac{1}{4}$ S 27° B.T.
 - A cedar, 10 ins. dia., bears S 68° W., 45 lks. dist., mkd. $\frac{1}{4}$ S 28° B.T.

- 40.90 Top of ridge, 280 ft. above creek, bears N. 86° E. and S. 86° W.

Descend gradually.

- 56.60 Wash, 20 lks. wide, 1 ft. deep, course N. 60° W.

- 78.50 Foot of descent, bears N. 60° W. and E.

- 79.00 Bottom of Dugout Creek, stream 3 lks. wide, 6 ins. deep, course S. 60° W.

- 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 21, 22, 27 and 28, mkd. on brass cap

T. 31 S. S. 21 in NW.

R 9 E. S 22 in NE.

S 27 in SE.; and

S 28 in SW. quadrants; and raise a mound

of stone 2 ft. base, 1 1/2 ft. high W. of cor.

Land, mountainous.

Soil, sand and clay. Subsoil, white clay.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass.

Mountainous land, or land covered with timber or brush

80.00 chs.

Aug. 29, 1911: At this cor. I set off 9°34' N. on the decl. arc; and at Oh Olm p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°6' N., which is the proper lat. nearly.

Subdivision T. 31 S., R. 9 E.

Chains

encl.

N.89°57'E. on a random line bet. secs. 22 and 27.

40:00 Set temp. 1/4 sec. cor.

80:04 Intersect N. and S. line 7 lks. N. of the cor. of secs. 22, 23, 26 and 27. Thence I run

West on a true line bet. secs. 22 and 27.

Over rolling mountainous land; through cedar and pinon pine timber and sagebrush.

4.00 Ascend to bench; bears NE. and SW.

40:02 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., mkd. on brass cap 1/4 S 22 in N. half, and S 27 in S. half; from which

A pinon pine, 9 ins. dia., bears N.85°E., 75 lks. dist., mkd. 1/4 S 22 B.T.

A pinon pine, 8 ins. dia., bears S.33°E., 47 lks. dist., mkd. 1/4 S 27 B.T.

45:00 Descend to canon bottom bearing N.60°W. and S.60°E.

Leave mesa.

57:50 Dugout Creek, 85 ft. below mesa, stream 3 lks. wide, course S.80°W. and bears S.80°E.

80:04 The cor. of secs. 21, 22, 27 and 28.

Land, mountainous.

Soil, sandy loam.

Timber, cedar.

Undergrowth, sage.

Good grass.

Mesa land, or land covered with timber or brush, 80.04 chs.

Aug. 29, 1911.

Aug. 30: At 8h 1m. a.m., l.m.t., I set off 38°06'N. on the lat. arc; 9°17'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21, 22, 27 and 28.

Thence I run

N.0°02'W. bet. secs. 21 and 22.

Subdivision T. 31 S., R. 9 E.

Chains	
	Over mountainous land; through cedar and pinon pine timber and sagebrush. Ascend gradually.
18.00	Top of spur, 80 ft. above cor., bears E. and W. Descend.
20.00	Bottom of swale, 75 ft. below spur; course S.80°W. Ascend.
35.00	Top of ridge, 100 ft. above swale, bears E. and W.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 21 in W. half, and S 22 in E. half; from which A pinon pine, 4 ins. dia., bears S.15°E., 36 lks. dist., mkd. $\frac{1}{4}$ S 22 B T A cedar, 4 ins. dia., bears N.4°W., 52 lks. dist., mkd. $\frac{1}{4}$ S 21 B T
44.00	Bottom of swale, 90 ft. below ridge, course W. Ascend.
52.10	Top of point, 80 ft. above swale, bears E. and W. Descend.
55.20	Bottom of swale, 85 ft. below point, course W. Ascend.
59.90	Top of point, 90 ft. above swale, bears E. and W. Descend.
63.00	Bottom of swale, 70 ft. below point, course W. Ascend.
70.05	Top of ridge, 80 ft. above swale, bears N.80°W. and S. 80°E. Descend.
77.00	Bottom of swale, 90 ft. below ridge, course W. Leave timber, bears E. and W. Ascend.
79.90	Top of ascent, bears N.55°W. and S.65°E. Enter mesa.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 15, 16, 21 and 22, mkd. on brass cap

T 31 S S 16 in NW.

R 9 E S 15 in NE.

S 22 in SE.; and

Subdivision T. 31 S., R. 9 E.

Chains

S. 21 in SW. quadrants; and raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor.

Land, mountainous.

Soil, sandy loam. Subsoil, clay.

Timber, cedar. Undergrowth, sage.

Good grass.

Mountainous land, or land covered with timber or brush,

80.00 chs.

Aug. 30, 1911: At the noon hour the sky is overcast, making solar observations impossible.

East, on a random line bet. secs. 15 and 22,

40.00 Set temp. 1/4 sec. cor.

80.00 Intersect N. and S. line 9 lks. S. of cor. of secs. 14, 15, 22 and 23. Thence I run

S. 89° 56' W. on a true line bet. secs. 15 and 22,

Over mesa land; through sagebrush.

Ascend.

1.50 Top of ascent, bears NW. and SE. Enter mesa.

25.00 Wash, 12 lks. wide, 2 ft. deep, course NW.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., mkd. on brass cap 1/4 S 15

in N. half, and S 22 in S. half; and raise a mound of stone 2 ft. base, 1 1/2 ft. high N. of cor.

80.00 The cor. of secs. 15, 16, 21 and 22.

Land, mesa.

Soil, sandy loam. Subsoil, gravel and clay.

No timber.

Undergrowth, sage.

Mesa land, or land covered with brush 80.00 chs.

August 30, 1911.

Aug. 31: The sky was overcast all day, making solar observations impossible.

Subdivision T. 31 S., R. 9 E.

Chains	
01.00	... N.0°02'W. bet. secs. 15 and 16.
	Over mesa land; through cedar timber and dense sage-brush.
9.00	Wash, 10 lks. wide, 2 ft. deep, course NW.
18.00	Wash, 15 lks. wide, 1 ft. deep, course NW.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 16 in W. half, and S 15 in E. half; from which
	A cedar, 4 ins. dia., bears E. 30°
	10 lks. dist., mkd. $\frac{1}{4}$ S 15 B T
	A cedar, 5 ins. dia., bears N. 2° W., 34
	10 lks. dist., mkd. $\frac{1}{4}$ S 16 B T
40.05	Wash, 10 lks. wide, 1 ft. deep, course N. 30° W.
67.00	Descend, over series of ledges bearing W. and S. 70° E.
70.00	Bottom of canon, 100 ft. below mesa, course W.
	Ascend.
79.50	Foot of 100 ft. ledge, bears NE. and W.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 9, 10, 15 and 16, mkd. on brass cap
	T 31 S S 9 in NW.
	R 9 E S 10 in NE.
	S 15 in SE.; and
	S 16 in SW. quadrants; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Land, rolling, mountainous.
	Soil, sandy loam.
	Subsoil, gravel and clay.
	Timber, cedar. Undergrowth, sage.
	Good grass.
	Mesa land, or land covered with timber or brush, 80.00
	chs.

N. 89° 56' E. on a random line bet. secs. 10 and 15.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

Subdivision T. 31 S., R. 9 E.

Chains

79.98 Intersect. N. and S. line 9 lks. N. of cor. of secs. 10,
 11, 14 and 15.
 Thence I run
 West, on a true line bet. secs. 10 and 15,
 Over mountainous land; through sagebrush.
 Descend.
 22.00 Bottom of canon, 400 ft. below cor., course N.10°E.
 Ascend.
 37.50 Top of point, 100 ft. above canon, bears N. and S.
 39.99 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
 the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 10
 in N. half, and S 15 in S. half; and raise a mound of
 stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
 49.00 Bottom of canon, 110 ft. below point, course S.70°W.
 Ascend.
 58.00 Top of spur, 60 ft. above canon, bears N.30°E. and S.30°
 W.
 Descend.
 59.00 Bottom of swale, 50 ft. below point, course S.30°W.
 Ascend.
 65.10 Top of point, 70 ft. above swale, bears N. and S.
 Descend.
 68.00 Bottom of swale, 70 ft. below point, course S.
 79.60 Foot of ledge, 100 ft. high, bears NE. and SW.
 79.98 The cor. of secs. 9, 10, 15 and 16.
 Land, mountainous.
 Soil, sand and clay.
 Subsoil, clay and gravel.
 Timber, cedar and pinon pine.
 Undergrowth, sage.
 Good grass for grazing.
 Mountainous land, or land covered with timber or brush
 79.98 chs.

Aug. 31, 1911.

Subdivision T. 31 S., R. 9 E.

Chains

Sept. 1: At 8h 0m a.m., l.m.t., I set off 38°08'N. on the lat. arc; 8°34'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 9, 10, 15 and 16. Thence I run N.0°02'W. bet. secs. 9 and 10.

Over rough mountainous land; through heavy cedar and pinon pine timber and sagebrush. Ascend.

7.00 Top of ridge, 160 ft. above sec. cor., bears N.60°W. and S.60°E.

Descend.

19.50 Head of hollow, 180 ft. below ridge, course N.60°W. Ascend.

21.00 Top of spur, 60 ft. above hollow, bears N.80°E. and S.80°W. Descend.

26.50 Bottom of swale, 50 ft. below spur, course S.80°W. Ascend.

30.60 Ledge, 60 ft. high, bears E. and W.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground, for 1/2 sec. cor., mkd. on brass cap 1/4 S 9 in W. half, and S 10 in E. half; from which
A cedar, 5 ins. dia., bears NE. 20 lks. dist., mkd. 1/2 S 10 B T
A cedar, 4 ins. dia., bears S.70°W., 60 lks. dist., mkd. 1/2 S 9 B T

42.40 Top of ridge, 300 ft. above swale, bears N.60°W. and S.60°E. Descend.

50.00 Broad swale, 40 ft. below ridge, course NW. Ascend.

60.00 Top of ascent, bears NW. and SE. Enter mesa.

70.00 Leave timber, bears NW. and SE.

74.20 Descend abruptly, bears NE. and SW. Leave mesa.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 3, 4, 9 and 10, mkd. on brass cap

T 31 S S 4 in NW.
R 9 E S 3 in NE.

Subdivision T. 31 S., R. 9 E.

Chains

S 10 in SE.; and
 S 9 in SW. quadrants; and raise a mound
 of stone 2 ft. base, 1½ ft. high W. of cor.
 Land, mountainous.
 Soil, sandy loam.
 Subsoil, gravel and clay.
 Timber, cedar and pinon pine. Undergrowth, sage.
 Good grass for grazing.
 Mountainous land, or land covered with timber or brush
 80.00 chs.
 Sept. 1, 1911: At this cor. I set off 8°30'N. on the
 decl. arc; and at 12h M. l.m.t., observe the sun on
 the meridian; the resulting lat. is 38°08'N., which
 is the proper lat. nearly.

East on a random line bet. secs. 3 and 10.
 40.00 Set temp. ¼ sec. cor.
 79.92 Intersect N. and S. line at the cor. of secs. 2, 3, 10
 and 11. Thence I run
 West on a true line bet. secs. 3 and 10.
 Over mountainous land; through sagebrush. Descend.
 39.96 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
 the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 3
 in N. half, and S 10 in S. half; and raise a mound of
 stone 2 ft. base, 1½ ft. high N. of cor.
 43.50 Bottom of hollow, 290 ft. below sec. cor., course N.20°W.
 Ascend.
 54.00 Top of clay ridge, 200 ft. above hollow, bears N. and S.
 Descend.
 65.00 Bottom of hollow, 260 ft. below ridge, course N.12°W.
 Ascend.
 68.50 Top of point 120 ft. above hollow, bears N. and S.
 Descend.
 71.50 Bottom of swale, 110 ft. below point, course N.

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

Ascend.

79.92

The cor. of secs. 3, 4, 9 and 10.
Land, mountainous.
Soil, sand and clay. Subsoil, clay and gravel.
No timber.
Undergrowth, sage. No grass.
Mountainous land, or land covered with brush 79.92 chs.

N.0°02'W. bet. secs. 3 and 4, on a true line.

Over mountainous land; through sagebrush and shadscale.

Descend.

30.00

Bottom of hollow, 180 ft. below cor., course N.30°W.

Ascend.

40.00

Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 4 in W. half, and S 3 in E. half; dig pits 18x18x12 ins. N. and S. of post 3 ft. dist., and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor.

42.90

Top of spur, 100 ft. above hollow, bears N.65°W. and S. 65°E. Descend.

46.00

Bottom of hollow, 120 ft. below spur, course N.50°W.
Ascend.

62.00

Top of point, 90 ft. above hollow, bears N.60°W. and S. 60°E. Descend.

64.10

Bottom of swale, 80 ft. below point, course N.50°W.
Ascend.

68.00

Top of ridge, 120 ft. above swale, bears N.60°W. and S. 60°E. Descend.

89.00

Bottom of hollow, 140 ft. below ridge, course N.70°W.
Ascend.

99.20

Top of ridge, 150 ft. above hollow, bears N.65°W. and S.65°E. Descend.

104.00

Bottom of swale, 90 ft. below ridge, course N.50°W.
Ascend.

110.75

Intersect Sixth Standard Parallel South 17.68 chs. E. of

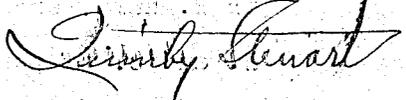
SUBDIVISION OF T. 31 S., R. 9 E.

Chains

Standard cor. of secs. 34 and 35, heretofore described.
 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in
 the ground for closing cor. of secs. 3 and 4, mkd. on
 brass cap
 T 30 S R 9 E in N half,
 C R 9 E S 3 in SE.; and
 C T 31 S S 4 in SW quadrants; and raise
 a mound of stone 2 ft. base, 1½ ft. high S. of cor.

Land, mountainous.
 Soil, sandy loam and clay.
 Subsoil, white clay.
 No timber.
 Undergrowth, sage and shadscale.
 Good grass.
 Mountainous land, or land covered with brush 110.75 chs.

September 1, 1911.



Instrumentman G.L.O.

Aug. 29, 1911: At 8h 1m a.m., i.m.t., I set off 38°04'N.
 on the lat. arc; 9°38'N. on the decl. arc; and deter-
 mine a meridian with the solar at the cor. of secs. 4,
 5, 32 and 33, on S. bdy. of Tp. heretofore described.

Thence I run
 N.0°03'W. bet. secs. 32 and 33.

Over mountainous land; through sagebrush.

- 2.00 Bottom of wash, 10 lks. wide, 1 ft. deep, course S.30°W.
- 6.85 Enter oat field, bears E. and W. This cultivated land
is claimed by Ben Baker and Geo. Coleman.
- 10.25 Leave oat field, bears E. and W.
- 14.50 South Creek, in wash, 100 lks. wide, 20 ft. deep, stream
2 lks. wide, 1 ft. deep, course N.80°W. and N.80°E.
- 27.00 Wash, 18 lks. wide, 6 ft. deep, course W.

39.011

Subdivision T. 31 S., R. 9 E.

Chains

40.00

Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 32 in W. half, and S 33 in E. half; dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist.; and raise a mound of earth 3 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

40.08

Ascent, bears N.80°E. and S.80°W. Leave bench.

51.00

Top of ridge, 100 ft. above bench; bears N.60°E. and S. 60°W. Descend.

62.00

Bottom of swale, 80 ft. below ridge, course W. Ascend.

64.00

Top of spur, 100 ft. above swale, bears E. and W. Descend.

73.80

Bottom of swale, 100 ft. below spur, course NW. Ascend.

80.00

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 28, 29, 32 and 33, mkd. on brass cap

T 31 S S 29 in NW

R 9 E S 28 in NE

S 33 in SE.; and

S 32 in SW. quadrants; and raise a mound

of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Land, bench or rolling mountainous.

Soil, sand or clay, from 6 ins. to 1 ft. deep.

Subsoil, clay or gravel.

Good grass.

Bench or mountainous land, or land covered with brush

80.00 chs.

Aug. 29, 1911: At this cor. I set off 9°34'N. on the decl. arc; and at Oh Olm p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°05'N., which is the proper lat. nearly.

East on a random line bet. secs. 28 and 33,

40.00

Set temp. $\frac{1}{4}$ sec. cor.

Subdivision T. 31 S., R. 9 E.

Chains	
80.02	Intersect N. and S. line at the cor. of secs. 27, 28, 33 and 34. Thence I run West on a true line bet. secs. 28 and 33, Over rough mountainous land; through cedar and pinon pine timber and sagebrush. Ascend.
.60	Top of ridge, bears N.30°W. and S.30°E., 10 ft. above corner. Descend.
6.50	Foot of descent, bearing N. and S.20°W.
7.50	Bottom of South Creek, 5 lks. wide, 2 ins. deep, 110 ft. below ridge, course S.30°W.
19.00	Ascent, bears N.30° E. and S.30°W. Leave canon bottom.
37.00	Ascend abruptly.
40.01	Point on sloping ledge, where it is impossible to perpetuate corner. I mark a cross (X) at exact cor. point on rock, and at
43.25	Set an iron post 3 ft. long, 1 in. dia., 26 ins. in the ground for witness corner to $\frac{1}{4}$ sec. cor., mkd. on brass cap W C $\frac{1}{4}$ S 28 in N. half, and S 33 in S. half; and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
45.00	Top of mountain, 900 ft. above creek, bears N.10°E. and S.10°W.
50.10	Descend from mountain, bearing N.20°E. and S.20°W.
59.90	Descend abruptly to swale.
66.15	Bottom of swale, 840 ft. below mountain, course N.65°W. Ascend.
72.00	Top of ridge, 60 ft. above swale, bears N.60°W. and S.60°E. Descend.
80.02	The cor. of secs. 28, 29, 32 and 33. Land, mountainous. Soil, sandy loam. Subsoil, clay. Timber, cedar. Undergrowth, sage.

Subdivision T. 31 S., R. 9 E.

Chains

Good grass, Mountainous land, or land covered with timber 80.02 chs.

August 29, 1911.

Aug. 30: At 8h 01m a.m., l.m.t., I set off $38^{\circ}05'N.$ on the lat. arc; $9^{\circ}17'N.$ on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28, 29, 32 and 33. Thence I run

$N.0^{\circ}03'W.$ bet. secs. 28 and 29.

Over mountainous land; through scattering cedar timber and sagebrush.

Descend.

4.50 Bottom of swale, 40 ft. below cor., course W. Ascend.

7.50 Top of spur, 60 ft. above swale, bears E. and W. Descend.

10.40 Bottom of swale, 100 ft. below spur, course W. Ascend.

14.50 Top of point, 90 ft. above swale, bears E. and W. Descend.

15.00 Enter heavy cedar and pinon pine timber, bears E. and W.

30.00 Bottom of swale, 110 ft. below point, course W. Ascend.

37.00 Top of spur, 60 ft. above swale, bears E. and W. Descend.

40.00 Set an iron post 3ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 29

in W. half, and S 28 in E. half, from which

A cedar, 8 ins. dia., bears $N.5^{\circ}E.$, 135

lks. dist., mkd. $\frac{1}{4}$ S 28 B T

A pinon pine, 10 ins. dia., bears $N.40^{\circ}W.$, 85

lks. dist., mkd. $\frac{1}{4}$ S 29 B T

42.00 Bottom of swale, 70 ft. below spur, course SW.

Ascend.

50.10 Foot of ledge, 50 ft. high, bears $N.60^{\circ}E.$ and $S.60^{\circ}W.$

59.00 Top of ridge, 250 ft. above swale, bears $N.80^{\circ}E.$ and S.

$80^{\circ}W.$

Descend.

Subdivision T. 31 S., R. 9 E.

Chains

- 72.40 Foot of descent, 100 ft. below ridge, bearing N.80°W. and S.80°E. Enter mesa.
- 72.95 Wash, 10 lks. wide, 2 ft. deep, course N.80°W.
- 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, mkd. on brass cap
 T 31 S S 20 in NW.
 R 9 E S 21 in NE.
 S 28 in SE.; and
 S 29 in SW. quadrants; and raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
 Land, mountainous.
 Soil, sandy loam. Subsoil, clay and gravel.
 Timber, cedar and pinon pine.
 Undergrowth, sage. Good grass.
 Mountainous land, or land covered with timber or brush
 80.00 chs.
 Aug. 30, 1911: At this cor. I set off 9°13'N. on the decl. arc; and at Oh lm p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°06'N., which is the proper lat. nearly.
- 40.00 East on a random line bet. secs. 21 and 28.
- 80.00 Set temp. ¼ sec. cor. Intersect N. and S. line 3 lks. S. of cor. of secs. 21, 22, 27, and 28. Thence I run S.89°59'W. on a true line bet. secs. 21 and 28. Over mesa land; through heavy cedar timber.
- 11.40 Dugout Creek, in wash, 3 lks. wide, 6 ins. deep, clear water, course N.70°W.
- 15.00 Old log cabin, bears N. 6.00 chs.
- 29.00 Wash, 19 lks. wide, 8 ft. deep, course N.60°W.
- 40.00 Leave timber, bears N. and S. Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in

Subdivision T. 31 S., R. 9 E.

Chains

the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 21 in N. half, and S 28 in S. half; and dig pits 18x18x12 ins. E. and W. of post 3 ft. dist.; and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high N. of cor.

64.50 Wash, 14 lks. wide, 6 ft. deep, course N.30°W.

80.00 The cor. of secs. 20, 21, 28 and 29.

Land, mesa, sloping NW.

Soil, sand or clay. Subsoil, gravel and clay.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mesa land, or land covered with timber or brush 80.00 chs.

August 30, 1911.

Aug. 31: At 8h 01m a.m., l.m.t., I set off 38°06'N. on the lat. arc; 8°56'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29. Thence I run

N.0°03'W. bet. secs. 20 and 21.

Over mesa land; through sagebrush.

20.00 Wash, 20 lks. wide, 4 ft. deep, course NW.

38.50 Wash, 20 lks. wide, 6 ft. deep, course N.35°W. Enter cedar timber bearing E. and W.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 20 in W. half, and S 21 in E. half; from which

A cedar, 12 ins. dia., bears S.9°E., 75

lks. dist., mkd. $\frac{1}{4}$ S 21 B T

A cedar, 8 ins. dia., bears S.38°W., 40

lks. dist., mkd. $\frac{1}{4}$ S 20 B T

56.10 Dugout Creek in wash, 3 lks. wide, 5 ins. deep, clear water, course N.60°W.

75.00 Wash, 30 lks. wide, 4 ft. deep, course N.70°W.

Leave timber, bears E. and W.

Subdivision T. 31 S., R. 9 E.

Chains

80.00

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 16, 17, 20 and 21, mkd. on brass cap

T-31 S S. 17 in NW
 R-9 E S 16 in NE
 S 21 in SE; and
 S 20 in SW quadrants; and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.

Land, mesa.
 Soil, sandy loam. Subsoil, clay and gravel.
 Timber, cedar and pinon pine.
 Undergrowth, sage.
 Mesa land, or land covered with timber or brush, 80.00 chs.

Aug. 31, 1911: At this cor. I set off 8°52'N. on the decl. arc; and at 0h 1m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°07'N., which is the proper lat. nearly.

N. 89°59'E. on a random line bet. secs. 16 and 21.

40.00

Set temp. ¼ sec. cor.

79.96

Intersect N. and S. line 2 lks. N. of the cor. of secs. 15, 16, 21 and 22.

Thence I run

West on a true line bet. secs. 16 and 21.

Over mesa land; through sagebrush.

Descend.

1.40

Foot of descent bears N. 60°W. and S. 60°E.

20.30

Wash, 10 lks. wide, 2 ft. deep, course NW.

38.60

Wash, 20 lks. wide, 4 ft. deep, course N. 60°W.

39.98

Set an iron post 3 ft. long; 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., mkd. on brass cap ¼ S 16 in N. half, and S 21 in S. half, and raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.

47.00

Wash, 25 lks. wide, 4 ft. deep, course S. 80°W.

Subdivision T. 31 S., R. 9 E.

Chains

79.96

The cor. of secs. 16, 17, 20, and 21. Mesa land, mesa. Soil, sandy loam. Subsoil, clay and gravel. No timber. Undergrowth, sage. Good grass for grazing. Mesa land, or land covered with brush, 79.96 chs. August 31, 1911.

Sept. 1, 1911: At 8h 0m a.m., l.m.t., I set off 38°07' on the lat. arc; 8°34'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21. Thence I run N.0°03'W. bet. secs. 16 and 17, Over mesa land; through sagebrush.

24.00

Wash, 20 lks. wide, 2 ft. deep, course N.80°W.

40.00

Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/2 sec. cor., mkd. on brass cap 1/4 S 17 in W. half, and S 16 in E. half; and raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor.,

56.00

Wash, 6 lks. wide, 2 ft. deep, course N.70°W.

66.00

Top of ridge, 20 ft. above mesa, bears N.75°W. and S. 75°E.

75.00

Enter cedar and pinon pine timber, bears N.60°W. and S. 60°E.

78.80

Wash, in hollow, 40 lks. wide, 6 ft. deep, course NW.

80.00

Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for cor. of secs. 8, 9, 16 and 17, mkd. on brass cap T 31 S S 8 in NW. R 9 E S 9 in NE. S 16 in SE. and S 17 in SW quadrants; from which A cedar, 4 ins. dia., bears S.50°E., 80°

Subdivision T. 31 S., R. 9 E.

Chains

1 ks. dist., mkd. T 31 S. R 9 E S 16 B T.

A pinon pine, 6 ins. dia., bears S. 20° W., 125

1 ks. dist., mkd. T 31 S. R 9 E S 17 B T.

No other bearing trees within limits; raise a mound of
stone 2 ft. base, 1½ ft. high W. of cor.

Land, mesa.

Soil, sandy loam.

Subsoil, gravel.

Timber, cedar and pinon pine.

Undergrowth, sage.

Mesa land or land covered with timber or brush 80.00
chs.

Sept. 1, 1911: At this cor. I set off 8°30' N. on the
decl. arc; and at 12h M.l.m.t., observe the sun on the
meridian, the resulting lat. is 38°08' N., which is the
proper lat. nearly.

East, on a random line bet. secs. 9 and 16,

- 40.00 Set temp. ¼ sec. cor.
- 79.92 Intersect N. and S. line 5 ks. N. of the cor. of secs. 9,
10, 15 and 16. Thence I run
N. 89° 58' W., on a true line bet. secs. 9 and 16.
Over mountainous land; through cedar timber and sage-
brush; descend.
- 5.00 Ledge, 20 ft. high, bears NW. and S. 88° E.
- 39.96 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for ½ sec. cor., mkd. on brass cap ½ S 9 in
N. half, and S 16 in S. half; and raise a mound of
stone 2 ft. base, 1½ ft. high W. of cor.
- 49.00 Wash in hollow, 40 ks. wide, 4 ft. deep, 200 ft. below
sec. cor., course N. 60° W. Ascend to low flat point.
- 52.00 Descend from point, bearing N. 70° E. and S. 80° W.
- 63.90 Wash in hollow, 30 ks. wide, 8 ft. deep, course S. 80° W.
- 75.10 Same wash, course N. 60° W.
- 78.06 Same wash, course SW.

Subdivision T. 31 S., R. 9 E.

Chains

79.92

The cor. of secs. 8, 9, 16 and 17.
 Land, mountainous.
 Soil, sandy loam. Subsoil, clay and gravel.
 Timber, cedar.
 Undergrowth, sage.
 Good grass for grazing.
 Mountainous land or land covered with timber or brush
 79.92 chs.

Sept. 1, 1911.

Sept. 2: At 8h 0m a.m., l.m.t., I set off 38°08'N. on the lat. arc; 8°12'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8, 9, 16 and 17. Thence I run

N.0°03'W. bet. secs. 8 and 9.

Over mountainous land; through cedar timber and sagebrush.

2.10

Ascent, bears E. and N.60°W.

5.00

Top of ridge, 60 ft. above sec. cor., bears N.60°E. and SW. Descend.

19.00

Bottom of hollow, 70 ft. below ridge, course S.55°W. Ascend.

36.50

Top of ascent, 200 ft. above hollow, bears N.60°W. and S.60°E. Leave timber, bearing N.60°W. and S.60°E. Enter broad ridge.

40.00

Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., mkd. on brass cap ¼ S 8 in W. half, and S 9 in E. half; and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.

51.00

Descent, bears NW. and S.60°E. Leave ridge.

69.50

Wash, 20 lks. wide, 1 ft. deep, course N.15°W.

80.00

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 4, 5, 8 and 9, mkd. on brass cap

T 31 S S 5 in NW.

R 9 E S 4 in NE.

Subdivision T. 51 S., R. 9 E.

Chains

S 9 in SE.; and
 S 8 in SW. quadrants; dig pits 18x18x12
 ins. in each sec. 5½ ft. dist.; and raise a mound of
 earth 4 ft. base, 2 ft. high W. of cor.
 Land, mountainous.
 Soil, sandy loam.
 Subsoil, gravel.
 Timber, cedar.
 Undergrowth, sage.
 Good grass for grazing.

Mountainous land, covered with timber or brush 80.00
 chs.

Sept. 2, 1911: At this cor. I set off 8°8'N. on the
 decl. arc; and at 12h M. l.m.t., observe the sun on
 the meridian; the resulting lat. is 38°08½'N., which
 is the proper lat. nearly.

S. 89°58'E. on a random line bet. secs. 4 and 9.
 40.00 Set temp. ¼ sec. cor.
 79.96 Intersect N. and S. line 2 lks. N. of cor. of secs. 3, 4,
 9 and 10. Thence I run
 N. 89°57'W. on a true line bet. secs. 4 and 9.
 Over mountainous land; through cedar and pinon pine
 timber and sagebrush. Ascend abruptly.
 3.10 Top of ridge, 140 ft. above cor., bears N. and S.
 Descend abruptly.
 7.50 Head of hollow, 120 ft. below ridge, course N.
 Ascend.
 21.80 Top of ridge, 110 ft. above hollow, bears N. and S.
 Descend.
 35.00 Swale, drains NW.
 39.98 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
 the ground for ¼ sec. cor., mkd. on brass cap ¼ S 4 in
 N. half, and S 9 in S. half; from which
 A pinon pine, 8 ins. dia., bears N. 66°E., 76

SUBDIVISION OF T. 31 S., R. 9 E.

Chains	<p>lks. dist., mkd. $\frac{1}{4}$ S 4 B T</p> <p>A pinon pine, 5 ins. dia., bears S.58°E., 23</p> <p>lks. dist., mkd. $\frac{1}{4}$ S 9 B T</p>
55.00	<p>Top of ridge, 100 ft. above flat, bears N.70°W. and S. 70°E. Descend to flat.</p>
65.00	<p>Wash, 30 lks. wide, 2 ft. deep, course N.10°W.</p>
79.96	<p>The cor. of secs. 4, 5, 8 and 9.</p> <p>Land, mountainous.</p> <p>Soil, sand. Subsoil, gravel.</p> <p>Timber, cedar and pinon pine.</p> <p>Undergrowth, sage.</p> <p>Mountainous land, or land covered with timber or brush</p> <p>79.96 chs.</p>

	<p>N.0°03'W. bet. secs. 4 and 5 on a true line,</p> <p>Over nearly level land; through cedar and pinon pine timber and sagebrush.</p>
12.00	<p>Wash, 20 lks. wide, 3 ft. deep, course N.70°W.</p>
33.00	<p>Wash, 6 lks. wide, 2 ft. deep, course N.60°W.</p>
37.00	<p>Top of ridge, 30 ft. above cor., bears N.80°W. and S.80° E.</p> <p>Descend.</p>
40.00	<p>Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 5 in W. half, and S 4 in E. half; from which</p> <p>A cedar, 5 ins. dia., bears S.70°E., 12</p> <p>lks. dist., mkd. $\frac{1}{4}$ S 4 B T</p> <p>A cedar, 10 ins. dia., bears S.88°W., 32</p> <p>lks. dist., mkd. $\frac{1}{4}$ S 5 B T</p>
50.00	<p>Wash, 10 lks. wide, 2 ft. deep, course S.85°W.</p>
110.76	<p>Intersect Sixth Standard Parallel South 17.75 chs. E. of standard cor. of secs. 33 and 34, heretofore described.</p> <p>Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 4 and 5, mkd. on brass cap</p>

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

T 30 S R 9 E in N. half
 C R 9 E S 4 in SE.; and
 C T 31 S S 5 in SW. quadrants; and raise a
 mound of stone 2 ft. base, 1½ ft. high S. of cor.
 Land, rolling mountainous.
 Soil, sandy loam.
 Subsoil, gravel.
 Timber, cedar and pinon pine.
 Undergrowth, sage.
 Good grass for grazing.
 Rolling mountainous land, or land covered with timber
 or brush 110.76 chs.

September 2, 1911.

John R Stewart
 Instrumentman G.L.O.

Sept. 2: At 8h a.m., l.m.t., I set off 38°04'N. on the
 lat. arc; 8°12'N. on the decl. arc; and determine a
 meridian with the solar at the cor. of secs. 5, 6, 31
 and 32 on S. bdy. of Tp. heretofore described.

Thence I run

N.0°03'W. bet. secs. 31 and 32.

Over rolling land; through sagebrush.

- 3.70 Wash, 10 lks. wide, 2 ft. deep, course S.80°W.
- 20.00 Enter cedar timber, bears E. and W.
- 31.00 Top of low ridge, 60 ft. above sec. cor., bears E. and W.
- 31.40 Pole and wire fence bears E. and W.
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
 the ground for ¼ sec. cor., mkd. on brass cap ¼ S 31
 in W. half, and S 32 in E. half; from which
 A cedar, 6 ins. dia., bears N.40°E., 80
 lks. dist., mkd. ¼ S 32 B T
 A cedar, 12 ins. dia., bears N.80°W., 126
 lks. dist., mkd. ¼ S 31 B T
- 52.00 Wash, 10 lks. wide, 2 ft. deep, course N.70°W.

.Subdivision T. 31 S., R. 9 E.

Chains

79.00 Wash, 12 lks. wide, 6 ins. deep, course W.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 29, 30, 31 and 32, mkd. on brass cap

03. T 31 S S 30 in NW.

R 9 E S 29 in NE.

S 32 in SE.; and

S 31 in SW. quadrants; from which

A cedar, 8 ins. dia., bears N. 63° E., 105 lks. dist., mkd. T 31 S R 9 E S 29 B T

A cedar, 14 ins. dia., bears S. 89° E., 26 lks. dist., mkd. T 31 S R 9 E S 32 B T

A cedar, 6 ins. dia., bears S. 30° W., 58 lks. dist., mkd. T 31 S R 9 E S 31 B T

A cedar, 12 ins. dia., bears N. 40° W., 55 lks. dist., mkd. T 31 S R 9 E S 30 B T

Land, rolling.

Soil, sandy loam.

Subsoil, gravel.

Timber, cedar.

Undergrowth, sage.

Good grass.

Rolling land, or land covered with timber or brush,

80.00 chs.

East on a random line bet. secs. 29 and 32,

40.00 Set temp. 1/4 sec. cor.

80.00 Intersect N. and S. line 5 lks. N. of cor. of secs. 28, 29, 32 and 33. Thence I run

N. 89° 58' W. on a true line bet. secs. 29 and 32,

Over rolling land; through heavy cedar timber and sagebrush. Descend.

3.50 Bottom of swale, 25 ft. below sec. cor., course N. 30° W.

Ascend to low point.

11.00 Descend to flat, bearing N. and S.

Subdivision T. 31 S., R. 9 E.

Chains	
17.90	Wash, 8 lks. wide, 1 ft. deep, course N.30°W.
40.00	<p>Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 29 in N. half, and S 32 in S. half; from which</p> <p style="padding-left: 40px;">A cedar, 6 ins. dia., bears N.60°W., 150 lks. dist., mkd. $\frac{1}{4}$ S 29 B T</p> <p style="padding-left: 40px;">A cedar, 4 ins. dia., bears S.5°E., 132 lks. dist., mkd. $\frac{1}{4}$ S 32 B T</p>
52.40	South Creek; in wash; stream 4 lks. wide, 3 ins. deep, course N.65°W.
80.00	<p>The cor. of secs. 29; 30; 31 and 32.</p> <p>Land, rolling.</p> <p>Soil, sandy loam. Subsoil, gravel.</p> <p>Timber, cedar.</p> <p>Good grass.</p> <p>Rolling land, or land covered with timber or brush</p> <p style="padding-left: 40px;">80.00 chs.</p> <p>Sept. 2, 1911: At this cor. I set off 8°08'N. on the decl. arc; and at 12h M. l.m.t., observe the sun on the meridian; the resulting lat. is 38°05'N., which is the proper lat. nearly.</p>
40.00	<p style="padding-left: 40px;">West, on a random line bet. secs. 30 and 31,</p> <p>Set temp. $\frac{1}{4}$ sec. cor.</p>
77.62	<p>Intersect W. bdy. of Tp. at the cor. of secs. 25,30,31 and 36, which is an iron post 3 ins. in dia., extending 12 ins. above ground, firmly set and mkd. and witnessed as described by the Surveyor General.</p> <p>Thence I run</p> <p style="padding-left: 40px;">East on a true line bet. secs. 30 and 31.</p> <p>Over rolling land; through cedar timber and dense sagebrush.</p> <p>Ascend.</p>
5.00	<p>Top of spur, 30 ft. above cor., bears NW. and SE.</p> <p>Descend.</p>

Subdivision T. 31 S., R. 9 E.

Chains

- 10.00 Foot of descent, bears NW. and SE.
- 24.00 Wash, 20 lks. wide, 2 ft. deep, course N.60°E.
- 29.00 Sweet Water Wash, 120 lks. wide, 6 ft. deep, course N.20°
W.
- 37.62 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 30
in N. half, and S 31 in S. half; from which
A cedar, 10 ins. dia., bears N.87°E., 105
lks. dist., mkd. $\frac{1}{4}$ S 30 B T
A cedar, 4 ins. dia., bears S.34°E., 50
lks. dist., mkd. $\frac{1}{4}$ S 31 B T
- 39.60 Wash, 10 lks. wide, 2 ft. deep, course N.
- 48.00 Low point, 20 ft. above wash, bears N. and S.
Descend.
- 52.10 Wash, 12 lks. wide, 2 ft. deep, course NW.
- 77.62 The cor. of secs. 29, 30, 31 and 32.
Land, rolling.
Soil, sandy.
Subsoil, gravel.
Timber, cedar.
Undergrowth, sage.
Good grass.
Rolling land or land covered with timber or brush,
77.62 chs.

N.0°03'W. bet. secs. 29 and 30.

Over rolling land; through cedar timber and sagebrush.

- 9.00 South Creek, in wash, stream 3 lks. wide, 6 ins. deep,
clear water, course N.70°W.

- 37.40 Top of point, 60 ft. above creek, bears E. and W.
Descend.

- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 30
in W. half, and S 29 in E. half; and raise a mound of
stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of cor.

Subdivision T. 31 S. R. 9 E.

Chains

45.00 Wash, 30 lks. wide, 3 ft. deep, course $S.80^{\circ}W.$

60.00 Ascend to bench, bearing $N.60^{\circ}E.$ and $S.60^{\circ}W.$

73.60 Wash, 6 lks. wide, 2 ft. deep, course $SW.$

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 26 ins. in the ground for cor. of secs. 19, 20, 29 and 30, mkd. on brass cap

$T. 31 S. R. 9 E. S. 19$ in NW.

$R. 9 E. S. 20$ in NE.

$S. 29$ in SE.; and

$S. 30$ in SW. quadrants; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Land, rolling.

Soil, sand. Subsoil, gravel.

Timber, none.

Undergrowth, sage.

Rolling land, covered with brush 80.00 chs.

Sept. 2, 1911.

Sept. 4, 1911: At 7h 59m a.m., l.m.t., I set off $7^{\circ}28'N.$ on the decl. arc; $38^{\circ}06'N.$ on the lat. arc; and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30. Thence I run $S.89^{\circ}58'E.$ on a random line bet. secs. 20 and 29.

40.00 Set temp. $\frac{1}{2}$ sec. cor.

79.96 Intersect N. and S. line 5 lks. S. of cor. of secs. 20, 21, 28 and 29.

Thence I run West on a true line bet. secs. 20 and 29. Over nearly level land; through cedar timber and sage-brush.

17.00 Wash, 20 lks. wide, 4 ft. deep, course $SW.$

27.10 Top of spur, 30 ft. above wash, bears $N.10^{\circ}E.$ and $S.10^{\circ}W.$ Descend.

30.60 Wash, 6 lks. wide, 2 ft. deep, course $SW.$

34.00 Top of ridge, 20 ft. above wash, bears $N.20^{\circ}E.$ and $S.$

Subdivision T. 31 S., R. 9 E.

Chains

20°W. Descend.

- 39.98 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 20 in N. half, and S. 29 in S. half; from which
 A cedar, 8 ins. dia., bears N. 57°W., 75 lks. dist., mkd. $\frac{1}{4}$ S 20 B T
 A cedar, 7 ins. dia., bears S. 8°E., 113 lks. dist., mkd. $\frac{1}{4}$ S 29 B T

76.00 Wash, 10 lks. wide, 4 ft. deep, course S. 20°W.

79.96 The cor. of secs. 19, 20, 29, and 30.
 Land, rolling.
 Soil, sandy loam.
 Subsoil, gravel.
 Good grass.
 Timber, cedar.
 Undergrowth, sage.
 Rolling land or land covered with timber or brush 79.96 chs.
 Sept. 4, 1911: At this cor. I set off 7°24'N. on the decl. arc; and at 11h 59m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°06'N., which is the proper lat. nearly.

West, on a random line bet. secs. 19 and 30.

- 40.00 Set temp. $\frac{1}{4}$ sec. cor.
- 77.50 Intersect W. bdy. of Tp. 5 lks. S. of cor. of secs. 19, 24, 25 and 30, which is an iron post 3 ins. dia., extending 12 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general.
 Thence I run
 S. 89°58'E. on a true line bet. secs. 19 and 30.
 Over mountainous land; through cedar timber and sagebrush. Ascend.
- 13.00 Top of spur, 70 ft. above corner, bears N. and S.
- 16.00 Bottom of swale, 80 ft. below spur, course SW.

Subdivision T. 31 S., R. 9 E.

Chains

Ascend.

24.70 Sandstone ledges, 40 ft. high, bear N.15°W. and S.15°E.

31.80 Top of ridge, 90 ft. above wash, bears N.10°W. and S. 10°E.

Descend.

37.50 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., mkd. on brass cap 1/4 S 19 in N. half, and S 30 in S. half; from which

A cedar, 6 ins. dia., bears N.33°E., 114

lks. dist., mkd. 1/4 S 19 B T

A cedar, 8 ins. dia., bears S.45°W., 28

lks. dist., mkd. 1/4 S 30 B T

41.80 Wash, 2 lks. wide, 2 ft. deep, course S.

Ascend.

46.50 Top of ridge, 40 ft. above wash, bears N. and S.

Descend.

58.00 Wash, 10 lks. wide, 2 ft. deep, course S.20°W.

65.00 Ascend to bench, bearing N.10°E. and S.10°W.

77.50 The cor. of secs. 19, 20, 29 and 30.

Land, mountainous.

Soil, sandy loam. Subsoil, gravel.

Timber, cedar.

Undergrowth, sage.

Good grass.

Rolling mountainous land, or land covered with timber or brush, 77.50 chs.

N.0°03'W. bet. secs. 19 and 20.

Over mesa land; through cedar timber and sagebrush.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., mkd. on brass cap 1/4 S 19 in W. half, and S 20 in E. half; from which

A cedar, 5 ins. dia., bears N.20°E., 40

lks. dist., mkd. 1/4 S 20 B T

A cedar, 5 ins. dia., bears N.74°W., 30

Subdivision T. 31 S., R. 9 E.

Chains

lks. dist., mkd. $\frac{1}{4}$ S 19 B T

42.70 Descend from mesa, bearing N.10°E. and S.10°W.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 17, 18, 19 and 20, mkd. on brass cap.

T 31 S S 18 in NW.

R 9 E S 17 in NE.

S 20 in SE.; and

S 19 in SW. quadrants; and raise a mound

of stone 2 ft. base, 1½ ft. high W. of cor.

Land, rolling.

Soil, sandy loam. Subsoil, gravel.

Timber, cedar.

Undergrowth, sage.

Good grass.

Mesa land, or land covered with timber or brush 80.00

chs.

Sept. 4, 1911.

Sept. 5: At 7h 59m a.m., l.m.t., I set off 38°07'N. on the lat. arc; 7°06'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20.

Thence I run

East on a random line bet. secs. 17 and 20.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

79.98 Intersect N. and S. line at the cor. of secs. 16, 17, 20 and 21. Thence I run

West, on a true line bet. secs. 17 and 20.

Over mesa land; through dense sagebrush.

3.20 Enter heavy cedar timber, bears NW. and SE.

5.00 Wash, 40 lks. wide, 6 ft. deep, course N.60°W.

20.00 Dugout Creek, 3 lks. wide, 3 ins. deep, in wash, 100 lks. wide, 10 ft. deep, course N.

39.99 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the

Subdivision T. 31 S., R. 9 E.

Chains

ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 17 in N. half, and S 20 in S. half; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.

61.20 Wash, 60 lks. wide; 4 ft. deep, course N.35°W.

75.80 Descend from mesa, bears N. and S.

79.98 The cor. of secs. 17, 18, 19 and 20.

Land, mesa.

Soil, sandy loam.

Subsoil, gravel and clay.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mesa land, or land covered with timber or brush 79.98

chs.

Sept. 5, 1911: At this cor. I set off 7°02'N. on the decl. arc; and at 11h 59m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°07'N., which is the proper lat. nearly.

N.89°58'W. on a random line bet. secs. 18 and 19,

40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.42 Intersect W. bdy. of Tp. at the cor. of secs. 13, 18, 19 and 24, which is an iron post 3 ins. dia., extending 12 ins. above ground, firmly set and mkd. and witnessed as described by the Surveyor General.

Thence I run

01.01 S.89°59'E. on a true line bet. secs. 18 and 19;

Over rolling mountainous land; through cedar and pinon pine timber and sagebrush. Descend gradually.

36.00 Bottom of swale, 60 ft. below cor., course N.60°W. Asc.

37.40 Top of ridge, 100 ft. above swale, bears NW. and SE.

Descend.

37.42 Set an iron post 3 ft. long; 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 18

in N. half, and S.19 in S. half, from which

Subdivision T. 31 S., R. 9 E.

Chains

A cedar 7 ins. dia., bears N. 66° E., 80

lks. dist., mkd. 1/4 S 18 B T

A cedar 4 ins. dia., bears S. 60° E., 26

lks. dist., mkd. 1/4 S 19 B T

45.00 Bottom of swale, 100 ft. below ridge, course N. 60° W.

Ascend.

77.42 The cor. of secs. 17, 18, 19 and 20.

Land, mountainous.

Soil, sandy loam. Subsoil, gravel.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mountainous land or land covered with timber and sagebrush 77.42 chs.

N. 0° 03' W. bet. secs. 17 and 18.

Over rolling land; through dense sagebrush.

9.00 Enter cedar timber, bearing NW. and SE.

9.10 Ascend to mesa, bearing NW. and SE.

27.60 Wash, 30 lks. wide, 6 ft. deep, course N. 60° W.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor., mkd. on brass cap 1/4 S 16 in W. half, and S 17 in E. half; from which

A cedar, 4 ins. dia., bears S. 60° E., 68

lks. dist., mkd. 1/4 S 17 B T

A cedar, 6 ins. dia., bears S. 19° W., 65

lks. dist., mkd. 1/4 S 18 B T

42.60 Dugout Creek, 4 lks. wide, 2 ins. deep, in wash, 200 lks. wide, 20 ft. deep, course N. 80° W.

73.00 Leave timber, bearing E. and W.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 17, 8, 17 and 18, mkd. on brass cap

T 31 S, S 7 in NW.

R 9 E S 8 in NE.

Subdivision T. 31 S., R. 9 E.

Chains

S 17 in SE.; and S 18 in SW. quadrants; and raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of cor.

Land, rolling mesa.

Soil, sandy loam. Subsoil, clay and gravel.

Timber, cedar and pinon pine.

Undergrowth, sage.

Good grass for grazing.

Mesa land, or land covered with timber or brush 80.00

chs.

Sept. 5, 1911.

Sept. 6: At 7h 59m a.m., l.m.t., I set off 38°08'N. on the lat. arc; 6°44'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 8, 17 and 18.

Thence I run a line East on a random line bet. secs. 8 and 17,

40.00

Set temp. 1/4 sec. cor.

79.94

Intersect N. and S. line at the cor. of secs. 8, 9, 16 and 17.

Thence I run a line West on a true line bet. secs. 8 and 17,

2.00

Over rolling mountainous land; through sagebrush.

28.00

Wash, 100 lks. wide, 4 ft. deep, course N.60°W. Ascend.

Top of ridge, 110 ft. above hollow, bears N.30°W. and S.30°E. Descend to mesa.

39.97

Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for 1/4 sec. cor.; mkd. on brass cap 1/4 S 8 in N. half, and S 17 in S. half; and raise a mound of stone 2 ft. base, 1 1/2 ft. high N. of cor.

41.00

Wash, 20 lks. wide, 2 ft. deep, course NW.

70.15

Wash, 12 lks. wide, 1 ft. deep, course N.

79.94

The cor. of secs. 7, 8, 17 and 18.

Land, rolling.

Chains

Soil, sandy loam. Subsoil, gravel.
 No timber.
 Undergrowth, sage.
 Good grass.
 Mesa land, or land covered with brush 79.94 chs.
 Sept. 6, 1911: At this cor. I set off 6°40'N. on the decl. arc; and at 11h 59m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°08'N., which is the proper lat. nearly.

- N.89°59'W. on a random line bet.secs. 7 and 18,
 40.00 Set temp. $\frac{1}{4}$ sec. cor.
 77.30 Intersect W, bdy. of Tp. 4 lks. N. of cor. of secs. 7, 12, 13 and 18, which is an iron post 3 ins.dia., extending 12 ins. above ground, firmly set and mkd. and witnessed as described by the Surveyor General.
 Thence I run
 N.89°59'E. on a true line bet. secs. 7 and 18.
 Over mountainous land; through cedar timber and dense sage.
 Descend.
 20.00 Foot of descent, bearing NW., and SE.
 21.10 Dugout Creek, 3 lks. wide, 6 ins. deep, 120 ft. below cor., course NW. Ascend.
 37.30 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 7 in N. half, and S 18 in S. half; and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high N. of cor.
 37.40 Top point, 100 ft. above creek, bears N.30°W. and S.30°E. Descend.
 43.30 Bottom of swale, 100 ft. below point, course S. Ascend.
 45.80 Top of point, 60 ft. above swale, bears N.20°W. and S. 20°E. Descend.
 50.90 Bottom of swale, 55 ft. below point, course SW. Ascend.
 59.60 Top of ascent; bears NW. and SE.

Subdivision T. 31 S., R. 9 E.

Chains

77.30 Enter mesa.
 The cor. of secs. 7, 8, 17 and 18.
 Land, mountainous.
 Soil, sand and clay. Subsoil, clay and gravel.
 Timber, cedar.
 Undergrowth, sage.
 Mountainous land or land covered with timber or brush
 77.30 chs.

N.0°03'W. bet. secs. 7 and 8.

Over mesa land; through sagebrush.
 31.50 Wash, 10 lks. wide, 2 ft. deep, course N.60°W.
 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
 the ground, for $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 7
 in W. half, and S 8 in E. half; and raise a mound of
 stone, 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
 42.00 Wash, 16 lks. wide, 4 ft. deep, course N.80°W.
 50.00 Top of ridge, 60 ft. above sec. cor., bears E. and W.
 Descend.
 54.50 Wash, in hollow, 60 lks. wide, 4 ft. deep, 120 ft. below
 ridge, course N.85°W. Ascend.
 60.70 Ledge, 60 ft. high, bears E. and W.
 73.00 Top of ridge, 400 ft. above hollow, bears NW. and S.60°
 E. Descend.
 80.00 Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in
 the ground for cor. of secs. 5, 6, 7 and 8, mkd. on
 brass cap
 T 31 S S 6 in NW.
 R 9 E S 5 in NE.
 S 8 in SE.; and
 S 7 in SW. quadrants; from which
 A cedar, 6 ins. dia., bears N.2°E., 105
 lks. dist., mkd. T 31 S R 9 E S 5 B T
 A cedar, 5 ins. dia., bears S.71°E., 33
 lks. dist., mkd. T 31 S R 9 E S 8 B T

Subdivision T. 31 S., R. 9 E.

Chains

.. A cedar, 4 ins. dia., bears S. 12° W., 35
lks. dist., mkd. T 31 S R 9 E S 7 B T

.. A cedar, 10 ins. dia., bears N. 32° W., 50
lks. dist., mkd. T 31 S R 9 E S 6 B T

Land, mesa, or mountainous.

Soil, sandy loam. Subsoil, gravel.

Timber, cedar.

Undergrowth, sage.

Mountainous or mesa land, or land covered with timber
or brush 80.00 chs.

Sept. 6, 1911.

Sept. 7: At 7h 58m a.m., l.m.t., I set off 38° 09' N. on
the lat. arc; 6° 22' N. on the decl. arc; and determine
a meridian with the solar at the cor. of secs. 5, 6, 7
and 8. Thence I run

East on a random line bet. secs. 5 and 8.

40.00 Set temp. 1/4 sec. cor.

80.04 Intersect N. and S. line 14 lks. S. of cor. of secs. 4,
5, 8 and 9. Thence I run

S. 89° 54' W. on a true line bet. secs. 5 and 8,

Over mountainous land; through cedar timber and sage-
brush.

4.50 Wash, 12 lks. wide, 2 ft. deep, course N. 30° W.

Ascend.

18.80 Top of ridge, 100 ft. above wash, bears N. 50° W. and S.
50° E.

Descend.

31.50 Head of hollow, 60 ft. below ridge, course N. 60° W.

Ascend.

34.00 Top of ridge, 60 ft. above hollow, bears N. 60° W. and S.
60° E.

40.02 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in
the ground for 1/4 sec. cor., mkd. on brass cap 1/4 S 5
in N. half, and S 8 in S. half; from which

Subdivision T. 31 S., R. 9 E.

Chains

.. A cedar, 4 ins.dia., bears S.17°E., 95

lks.dist., mkd. $\frac{1}{4}$ S 8 B T

.. A cedar, 4 ins.dia., bears N.49°E., 70

lks.dist., mkd. $\frac{1}{4}$ S 5 B T

50.00 Bottom of swale, 160 ft. below ridge, course NW.

Ascend.

67.50 Top of spur, 90 ft. above swale, bears NW. and SE.

Descend.

75.65 Bottom of swale, 80 ft. below spur, course NW.

Ascend.

80.04 The cor. of secs. 5, 6, 7 and 8.

Land, mountainous.

Soil, sandy loam.

Subsoil, clay and gravel.

Timber, cedar and pinon pine..

Undergrowth, sage.

Mountainous land, or land covered with timber or brush

80.04 chs.

Sept. 7, 1911: At this cor. I set off 6°18'N. on the decl. arc; and at 11h 58m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 38°09'N., which is the proper lat. nearly.

.. S.89°59'W. on a random line bet. secs. 6 and 7.

40.00 Set temp. $\frac{1}{4}$ sec. cor.

77.20 Intersect W. bdy. of Tp. 3 lks. N. of the cor. of secs.

1, 6, 7 and 12, which is an iron post 3 ins.in dia.,

extending 12 ins. above ground, firmly set and mkd.

and witnessed as described by the Surveyor General.

Thence I run

.. N.89°58'E. on a true line bet. secs. 6 and 7.

Over rough mountainous land; through sagebrush. Descend.

22.30 Wash, in hollow, 120 lks. wide, 8 ft. deep, 400 ft.

below cor., course N.60°W.

Ascend to point.

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

- 37.00 Bottom of swale, 20 ft. below point, course S.60°W.
Ascend.
- 37.20 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., mkd. on brass cap ¼ S 6 in N. half and S 7 in S. half; and raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
- 40.00 Top of ridge, 100 ft. above swale, bears N.70°E. and S. 70°W. Descend.
- 50.70 Top of same ridge, bears N.80°W. and S.80°E.
Descend.
- 61.30 Wash in hollow, 100 lks.wide, 6 ft. deep, 100 ft. below ridge, course NW. Ascend.
- 69.60 Top of ridge, 120 ft. above hollow, bears NW. and SE.
Descend.
- 77.20 The cor. of secs. 5, 6, 7 and 8.
Land, mountainous.
Soil, sand and clay. Subsoil, clay and gravel.
No timber.
Undergrowth, sage.
Mountainous land, or land covered with brush 77.20 chs.

N.0°03'W. bet. secs. 5 and 6, on a true line.

- Over mountainous land; through dense sagebrush.Descend.
- 4.50 Bottom of swale, 20 ft. below cor., course W.
Ascend to mesa.
- 25.50 Bottom of swale, 20 ft. below mesa, course N.80°W.
Ascend.
- 27.10 Top of ridge, 60 ft. above swale, bears E. and W.
Descend.
- 40.00 Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. mkd. on brass cap ¼ S 6 in W. half, and S 5 in E. half; and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
- 71.00 Wash, 40 lks. wide, 6 ft. deep, course S.70°W.
- 90.20 Wash, 20 lks. wide, 4 ft. deep, course N.70°W.

SUBDIVISION OF T. 31 S., R. 9 E.

Chains

101.00 Wash, 12 lks. wide, 3 ft. deep, course S.80°W.

110.87 Intersect Sixth Standard Parallel South, 17.90 chs. E. of standard cor. of secs. 32 and 33, heretofore described.

Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 5 and 6, mkd. on brass cap

T 30 S R 9 E in N. half,
 C R 9 E S 5 in SE.; and
 C T 31 S S 6 in SW. quadrants; and raise a mound of stone 2 ft. base, 1½ ft. high S. of cor.

Land, rolling, mountainous.

Soil, sandy loam.

Subsoil, gravel.

No timber.

Undergrowth, sage.

Mountainous or mesa land, or land covered with brush,
 110.87 chs.

Sept. 7, 1911.

Quincy Stewart

Instrumentman G. L. O.

GENERAL DESCRIPTION.

This township occupies a range of foot hills to the west of the Henry Mountains; the greater portion being cut up by deep gullies and ravines.

The land between the ravines is usually level, having once been a mesa; but where it has been cut up it has been left quite rugged.

There is generally a growth of cedar and pinon pine timber throughout the township; in the eastern portion it becomes extremely heavy, but is of no commercial value, except for fence posts. A good

GENERAL DESCRIPTION OF. T 31 S., R. 9 E.

growth of sage, a little service berry and buck brush will be found throughout the township.

The sedimentary formation is red and white sandstone, of which great masses will be exposed for miles along the gullies.

The soil is generally clay or sand; but there is a small quantity of black loam near the foot of the Henry Mountains.

There is some land being cultivated in secs. 32 and 33, by Messrs. Coleman and Baker, of Teasdale, Utah. Their crops were oats, corn, potatoes, etc.

There are two streams of water, South Creek and Dugout Creek, which cross the entire township from E. to W. Each stream flows nearly one second ft. of water in a normal season.

There are some indications of large bodies of coal in the central portion of the township, but we discovered no veins exposed.

There is a log house in the SE¹/₄ of sec. 21, owner unknown.

We found no indications of mineral in the township. There are no settlers living in this township.

John D Stewart
Gusiby Stewart

Sept. 7, 1911.

Instrumentmen G.L.O.

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Page

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 _____, I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of transitmen see book "P" T. 32 S., R. 9 E.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

U. S. Surveyor.

Subscribed by said _____, and sworn to before me }
this _____ day of _____, 191 _____ }



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 18 191 4

The foregoing field notes of the survey of _____ the subdivisonal lines of Township No. 31 South, Range No. 9 East of the Salt Lake Base and Meridian, Utah,

executed by _____ John R. Stewart and Quinby Stewart _____
under ^{their} special instructions dated _____ March 27 _____, 191 1, having been critically examined, and the necessary corrections and explanations made the said field notes, and the surveys they describe, are hereby approved.

[Signature]
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in _____, has been correctly copied from the original notes on file in this office.